THE UNIVERSITY OF HULL

A CRITICAL SYSTEMIC FRAMEWORK FOR STUDYING KNOWLEDGE IMPOSITION IN PEDAGOGY

being a Thesis submitted for the Degree of

PhD in Management

in the University of Hull

by

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December, 2002

ACKNOWLEDGEMENTS

It may be that in many cases the acknowledgements section has become a formality, something one simply has to write. It is just not that way in this case: Embarking in a project of more than four years of study overseas can hardly be seen as something that anyone could have achieved on her/his own, without the help of many other people. To think that way may be profoundly selfish, but, moreover, very non-systemic.

Some persons have helped at the expense of tremendous sacrifices in their lives. I am referring, of course, to my family: My wife, Marcela, who put off for almost five years the development of her professional career, and who made life easier to a shy person in a strange world away from home; also my two sons, Antonio and Tomás, who were conceived and born during these four and a half years of my studies, and who have had to therefore share my time with books and computers; and finally my mum, who, given that we never came to visit her while we were away, twice decided to take a plane to visit us and help with our then new-born baby.

On the academic side, I would like to thank my supervisor, Mike C. Jackson, who always helped me realise when I was wandering around without going anywhere, and who helped me with his timely advice to get back on the path. I must also thank him for having respected my own ways of thinking and for not having tried to impose his ideas on me. Contrary to popular wisdom, I have developed the impression that people of his great intellectual stature tend to be very imposing, and so I should consider myself fortunate in this respect. On a different level, I should say that I found the greatest source of intellectual encouragement and motivation in the learning community—if I may call it that way—that was formed at the School of Management, University of Lincolnshire and Humberside (presently called University of Lincoln), around the research seminars conducted by Gerard de Zeeuw and Raúl Espejo. Gerard somehow always made the seminars sufficiently stimulating and challenging so that there was always a reason to come back. Other participants who contributed greatly to the maintenance of that learning community while I was there were DP Dash, Héctor

Ponce, Zoraida Mendiwelso, Petri Jooste, Dimitrios Tsgadis, and Álvaro Carrizosa. I would like to thank them for having contributed, most probably without knowing it, to make me realise what kind of world I would like to live in.

On the financial side, Colciencias, in Colombia, fully sponsored me during the first three years of my studies. However, more than simply a public organisation, it represents the people of my country, who have somehow given me this opportunity with the hope that I will pay that back in a currency much more valuable than money. I simply want to say that I am fully aware of this debt and of what it means. But I was also in need when that sponsorship was over, and help came from the Business School, Hull University. In particular, I want to thank Mike C. Jackson, Mike Walsh, Peter Murray, and Wendy Gregory, for having helped me in one way or another to get the money I needed, without which the conditions for finishing my studies would have been very different.

To all of them, my appreciation and thankfulness.

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1. INTRODUCTION

1.1 CRITICALITY AND CENTRAL CONNECTIONS

As I see it, the text the reader is about to start reading represents the convergence, on one same project, of a number of theories and disciplines, personal interests, and external opportunities. It can be said to be about pedagogy insofar as it attempts to address a number of problems and questions about educational processes inside the classroom. My old interest in pedagogical issues is evidenced in my involvement in pedagogical topics since I was still an undergraduate student at Los Andes University, in Colombia, doing a dissertation on academic evaluation in a Department of Industrial Engineering. That interest was later fuelled by my teaching experiences, and has now provided the main domain of application for this project. But this study is also about systems thinking, insofar as central ideas provided by the systems approaches are used to [re]describe some of the questions about pedagogy, and its answers, so that they are better understood, or at least understood under a different light. In this respect the existing relation between the Universities of Hull, in England, and Los Andes, in Colombia, and within the latter specifically the Department of Industrial Engineering, has also allowed for an interest and a knowledge of the tools and theory proper of critical systems thinking to arise. This study is also in some sense about philosophy of language, insofar as it attempts to make use of, but also develop, philosophical ideas about language, to assist in the examination of the essentially linguistic nature of the pedagogical problems and questions referred to above. I first came in contact with the study of philosophy at the end of my undergraduate studies, taking advantage of the possibility of flexibly organising the curriculum at Los Andes. However, it was only in my Master's dissertation that I first used ideas from philosophy—in that case specifically the work of Richard Rorty—to reflect on problems specific of disciplines like management and industrial engineering. Although in some sense it could be said that the strands of thinking I have used within both systems thinking and philosophy of language are approaches with which one can observe, describe, and reflect on the discipline that defines a domain of action of pedagogy, in fact all three are bodies of knowledge that I have tried to bring together in conversation.

1.1.1 Autonomy of Thinking, Knowledge Imposition, and Criticality

In his lecture titled *What Is Critique?*, Foucault (1978) suggests that at least since Kant, there is an intimate relation, almost an identity, between the great project of the Enlightenment on the one hand, and on the other "a certain manner of thinking, of speaking, likewise of acting, and a certain relation to what exists, to what one knows, to what one does, as well as a relation to society, to culture, to others" that he calls the *critical attitude* (p.382). This critical attitude would be expressed in a number of elements: the formulation of questions about the legitimacy, authenticity, validity, or truth, of the sources of authority for the declaration of the norms one has been told to obey—e.g. the Scripture—and of the norms themselves; the questioning of the limits to the right to govern and to tell others to obey norms; and the non-acceptance as true or valid of what the authority says is true or valid, unless one has determined oneself that there are good reasons to accept it—i.e., not just because the authority says so (p.385).

Now, it is well known that the main motto of the Enlightenment project was "sapere aude!", which exhorts people to autonomously develop their own thinking or reasoning. The critical attitude described above would then be one way of producing, or perhaps of describing, the autonomy of thinking that was so advocated in the Enlightenment. The link, even if it may be problematic, is not so difficult to see: Firstly, by conceiving of the possibility that what the authority says might not be totally valid, or true, one would be opening the way for the acceptance of alternative options. Once there are alternatives, there is also a decision to be taken about which option to accept, if any. Furthermore, this decision would depend, at least in this formulation, on which of the

options one's own reason determines is more valid. And secondly, once one questions the limits of the right of the authority to govern others, there appears something outside those limits where it is now one's own reason which would dictate what one can or should do.

Foucault, however, suggests that the Kantian identification of Enlightenment with critique as inquiry into the truth or validity of forms of knowledge, is not the only possibility available. Indeed, he proposes an alternative form of inquiry, which he calls historicophilosophical, and which comprises the archaeological and genealogical dimensions of his work. I take it that the same claim about the existence of other alternatives apart from the Kantian one is also expressed in the work of other authors, insofar as they make use of different forms of critique which are also connected with central aspects of the Enlightenment project like that of the development of autonomous thinking or reasoning. Now, be it a Foucauldian historicophilosophical inquiry, a Kantian inquiry into validity and its limits, or some other option, one effect of the application of criticality appears to be the opening up of alternative possibilities¹. As said before, this now demands from the person being critical to take a decision—even if the very process of taking that decision can also be problematised. This very fact further suggests that the connection between criticality on the one hand, and thinking autonomy and knowledge imposition on the other, does not seem to be merely accidental. Or, in other words, that addressing the questions "how to develop autonomy of thinking or reasoning?" and "how to prevent the imposition of knowledge?" somehow seems to lead one to simultaneously address "how to produce/ promote criticality?" However, by no means do I intend to claim that the development of autonomy of thinking and the prevention of knowledge imposition are the only or the main purposes of criticality. There are certainly other purposes ascribed to criticality, emphasising different aspects like the development of the political participative dimension of human beings, of their ontological vocation, and so on. But nevertheless they are present and are affected by whatever view of criticality one holds.

A clarification is necessary: The postulation of this connection presupposes the

existence of past, present, and future interactions between persons upon whom knowledge can be imposed. Otherwise it could be said that the most obvious way of not imposing knowledge on someone and of allowing her/him autonomy of thinking, would be not to interact with her/him at all, or to do it minimally. And this does not require any form of criticality: just a lack of contact. No interactions with someone else would mean no knowledge imposition on her/him. Nevertheless, the assumption made here seems reasonable insofar as we all have been in interactions with others in the past, and will continue to do so in the future. It is all these interactions that matter for autonomy of thinking and for knowledge imposition.

1.1.2 Critical Knowledge

The idea of critique in itself seems to presuppose a distinction between the act and the product of knowing or reading reality on the one hand, and the act and the product of critiquing forms of knowledge or readings of reality, on the other. This is implicit in the simple idea espoused by proponents of critical thinking that someone can have some views about something, but then one should not accept them but first be critical about them. I will term critical knowledge the knowledge produced as the result of any critical inquiry of any kind into a form of knowledge. Depending on the particular critical approach, it could be knowledge of its limits, of its assumptions, of its exclusions, of the alternative possibilities that were repressed so that it could be acceptable and legitimate, of the hidden interests it serves, etc. But what kind of knowledge is it? Is it ideologically or culturally biased? Can it itself be imposed? How can it be justified? This issue, which is related to the problem of dogmatism, has been around for some time in philosophical debates. In this respect the solution proposed and shared by Karl Oto Apel and Jürgen Habermas of finding universal presuppositions entailed by any process of communication seems to have been particularly influential (see for instance Biesta, 1998). The Gadamer-Habermas discussion can also be

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¹ Throughout this whole document I will use the terms *criticality*, *critique*, *critical*, etc. with a broad sense that includes, but is not limited to, aspects of validity questioning. My intention is to cover the various approaches that attempt to not take for granted and inquire into forms of knowledge or processes of knowledge production.

interpreted as having been largely about this issue (see for instance Schmidt, 1996). Its importance can be seen in that if it can be proved that critical knowledge of some kind is self-evident, given, in agreement with human understanding or with human nature, or in general somehow universal, non-disputable, and non-theoretical, then it can constitute the basis for a universal form of knowledge associated to a potentially universal form of critical inquiry even if only with a limited scope or domain of application. Let me call this issue, the problem of foundations for critical knowledge.

There is, however, another related but different issue that, it seems to me, has received little attention in the literature: that of the linguistic relation that exists between critical knowledge and those forms of knowledge that constitute the object of inquiry for criticality—let me call them *first-level knowledge*, in opposition to the second-level character of critical knowledge. This distinction between first-level and second-level or critical knowledge is one between what those forms of knowledge are about: While first-level knowledge talks about some part of reality—e.g. physical objects, a particular problem situation, economics, etc.—second-level knowledge talks about first-level knowledge—its limitations, its [lack of] validity, its assumptions, the interests it serves, The questions that emerge around this issue in relation to the problem of knowledge imposition are not, at least in a direct way, about whether it is possible to construct or discover some form of incontrovertible and unavoidable universal basis for critique². They are, instead, about other issues like how it is that some form of [critical] knowledge—or its use—can help prevent the imposition of another [first-level] one; about the imposition of what specific types of first-level knowledge can be prevented by specific forms of critical knowledge; about what logical connections do or may exist between critical knowledge and first-level knowledge; or about whether and what firstlevel knowledge is required from someone in order to produce critical knowledge. They are, also, about whether there can be forms of first-level knowledge that are not inseparably linked to forms of second-level knowledge, and vice versa; i.e., whether the distinction can actually be made in a clear and distinct way. This second set of questions, as opposed to those addressing the problem of foundations described in the previous paragraph, refers to the mechanisms by which critical knowledge can have some effect on the problem of knowledge imposition. At the same time and precisely

² Answers to the former questions affect any answer one may want to give to the latter one, and indeed I will at some point discuss that link. However, that is not the emphasis given here.

because of this, it also shows the limits of its effectiveness in relation to that problem.

In the present study I intend to carry out an investigation in the line of the second set of questions, attempting to find out what is involved in the interaction that necessarily occurs between critical knowledge—as defined in various ways by various critical approaches—and first-level forms of knowledge. Let me postpone a less vague description of the questions and problems that will be addressed by this study until the end of this chapter. For the moment I simply want to explain that as the object of this investigation will be linguistic relations between linguistic objects, the tools that I will use will come mainly from the philosophy of language. In particular, I will make use of the work of some of the so-called post-analytic philosophers in the Anglo-US tradition; namely Willard van Orman Quine, Wilfrid Sellars, and more specially Richard Rorty and Donald Davidson. According to Rorty (1979), the other three have been key figures in the deep change in the understanding of philosophy and of language that has taken place since the middle of the 20th century in that tradition. As I will explain later in this document in more detail, Quine, Sellars and Davidson have all contributed to the creation of a holistic view of language and of knowledge—Rorty mainly providing an integrating element—which will be useful in the examination of the proposals made by various critical approaches in relation to knowledge imposition. In doing this, I will be effectively studying the theories used by those approaches—which I will call from now on theories of the critical—and from which critical knowledge is produced, as forms of knowledge in language. But perhaps more importantly, Quine's work on the problem of translation and Davidson's work on the problem of interpretation, both holistic through and through, provide an essential element for my purposes: They both focus on the relations that are established between two persons—a speaker on the one hand, and a translator or an interpreter on the other—as well as between two belief systems—that held by the speaker and that held by the translator or the interpreter. In particular, the latter relation is one between two different forms of knowledge, as represented by belief systems, and as such its study can provide essential clues as to the relation between critical knowledge and first-level knowledge.

It is perhaps necessary to clarify this theoretical choice a little further. Firstly, there is a question about why this particular strand—corresponding to the aforementioned authors—was chosen from among the various ones in philosophy of language in the

Anglo-U.S. tradition. Apart from mentioning my own previous acquaintance with Rorty's work as a sort of contributing explanatory element, it must be said that this strand has come to be perhaps the most important and influential one in the development of the discipline in the last few decades. For those more acquainted with the topic, it is arguably Quine's and Davidson's works which have been most recognised as seminal in this tradition. But secondly, there is also a question of why the choice of philosophy of language at all—and particularly in that tradition—and not, for example, some hermeneutic or poststructuralist philosophy, or some other. I will temporarily postpone this discussion, because I will first need to describe some of the issues that have appeared in discussions in educational theory as well as in systems thinking, that directly touch on the problem mentioned at the beginning of this section of the relation between first-order knowledge and critical knowledge. I will conclude this discussion later in this chapter.

Nevertheless, it should also be said that this reliance on the holistic philosophy of language of these authors suggests that this whole project can be seen as contained within a big "if... then..." structure. That is, to a great extent its usefulness and validity will depend on that of the philosophical work it is based on. However, the responsibility also and mainly lies on my own *development* of that philosophical work, and on the use I make of it in examining the implications of the *application* of various critical approaches with respect to knowledge imposition and autonomy of thinking. As the reader will notice later in chapters 6 and 7, my own position dictates that this distinction between application and development cannot be established in a principled way, and that every application is something of a development and every development is something of an application. I use it here just as a vague indicator of the kind of contribution that the reader can expect from this study.

1.2 AUTONOMY OF THINKING AND

KNOWLEDGE IMPOSITION IN PEDAGOGY

Educational processes are normally charged with a great degree of responsibility for the well-being of the whole society, as high hopes are put on the former to solve the problems of the latter. In particular, the importance that the development of autonomy of thinking in the individuals has for highly valued concepts in our societies like democracy, participation, and pluralism, has established this issue as a priority for the definition of educational purposes and practices. More specifically the proposal, as regards the issues discussed here, is to design various aspects of the classroom or classroom-related activities in order to help students develop autonomy of thinking, and to avoid the imposition of knowledge on them by any of a number of other actors—like the teacher, other students, and persons or groups not directly involved in the classroom activities. It is the action domain of pedagogy which I will concentrate on in this study.

This action domain is particularly attractive on an intellectual basis for the kinds of issues described above, because of some of its characteristics: Firstly, it comprises a relatively well defined space—in terms of time and location—where interactions take place in which the production and/or reproduction of knowledge is an acknowledged central purpose. Autonomy of thinking and knowledge imposition are basically about the production of knowledge. Secondly, the primary object around which the classroom activities are organised is knowledge. This is something shared with criticality, because one cannot be critical about normal objects. Rather, one can only be critical about forms of knowledge, or about social practices that represent knowledge. And thirdly, the domain of pedagogy poses some special problems for the development of autonomy of thinking, given the asymmetrical relation between its participants—teacher and students—in relation to knowledge.

There is a number of critical approaches in education, and the proponents of many of them have explicitly expressed their concern for the development of autonomy of thinking. In the English language the Critical Thinking Movement, Radical Pedagogy, Post-Radical pedagogies, and Critical Theory in Education, are some of the most influential. As I will argue later on, the ways in which the problems of preventing knowledge imposition and of promoting autonomy of thinking are tackled by these approaches are very different amongst them. Some problems, however, have been pointed out in the literature concerning either the failure of some of them to effectively help students develop autonomy of thinking, or moreover their implicit but active imposition of knowledge on the students. I will explain these criticisms in a more detailed way in chapter 2; for the moment, however, it is worth mentioning that the Critical Thinking Movement has been accused of failing to address hidden or nonexplicit [political] aspects of forms of knowledge—that may be imposed because they may pass unnoticed—as well as of creating an elite of users of a fancy terminology who can then impose their beliefs on others (see for instance Duhan Kaplan, 1991; and Giroux, 1994). Radical Pedagogy has been accused of imposing particular visions of society, as well as patriarchal rationalities (see for instance Ellsworth, 1989; Burbules, 1993; and Birmingham, 1998). Post-radical pedagogies have in turn been accused of not addressing the conditions lying beyond the purely textual, that impede altogether the development of autonomy of thinking and acting in students (see for instance Salman, 1998, and Rorty, 1999). Finally, the work on Critical Theory in Education and its emphasis on the form of the interactions between teacher and students, has been accused of failing to address the conditions outside of the classroom that affect what occurs inside it, as well as the hidden messages that are carried in forms of cultural or public knowledge (see for instance Maddock, 1999). On similar grounds other approaches putting the emphasis on pedagogical method have also been criticised for failing to address the particular social and political issues in the life of students that are susceptible to carry messages that can be imposed (see for instance Giroux, 1980a and 1980b; and Aronowitz, 1993).

The reader may now perhaps better see why the problem of foundations for critique, as regards knowledge imposition and autonomy of thinking, seems to be at the most as relevant as that of asking about the mechanisms by which some critical knowledge can help prevent the imposition of first-level forms, and about the relations between them. Some of the criticisms seem to suggest that the very use of pedagogies informed by theories of the critical actually promote knowledge imposition, and hinder the development of autonomy of thinking. In some other cases, the criticism seems to be that they are not powerful enough so as to prevent all forms of imposition. In all cases,

however, the question that appears is about the relation between the theory of the critical and first-order forms of knowledge, including both those that are imposed, and those whose imposition was not prevented. Nevertheless, the variety of ways of tackling the problems and the variety of criticisms suggests that it is perhaps in the details of the workings of each approach where the more relevant questions and answers are to be found for understanding how autonomy of thinking can be promoted and whether and which forms of knowledge imposition can be prevented.

1.3 THE SYSTEM IDEA

Systems thinking can be said to not represent a disciplinary body of knowledge, but rather a transdisciplinary way of approaching knowledge in various disciplines. Of course, regardless of it being an approach, it also constitutes and makes use of a body of knowledge—or, rather, some somewhat distinguishable bodies of knowledge. But importantly because it is an approach, it can be applied or used to reflect on various domains of action as they have traditionally been defined. As such, one possible domain for systems thinking is education, and more specifically the pedagogical activities that take place inside the classroom. Now, systems thinking's anti-reductionist stance and central concepts—like holism, feedback, boundary, teleology and teleonomy—have been shown to provide powerful insights for the understanding of many kinds of situations, as well as being the source of a large number of approaches for improving them (see for instance Jackson, 2000).

Some articles and papers have been published in which pedagogy is examined from a critical or emancipatory systems thinking perspective (see for example Gregory, 1993; and Espinosa, 2000). I take it, however, that these systemic reflections on pedagogy are applications of already-established and developed theoretical strands in systems thinking. This way for instance, Gregory's work made use of Flood and Jackson's conceptualisation of the systemic paradigms (1991; see also Jackson, 1991); Espinosa specifically applied in a classroom a protocol developed by Beer for democratically organising the conversations within a group of people (see Beer, 1994). However, other

strands of systems thinking do not seem to have been applied in the domain of actions that concerns me here. For these reasons, I will concentrate on the theoretical critical systemic approaches rather than on their limited applications on pedagogy. The idea is that if these approaches can promote autonomy of thinking and/or prevent knowledge imposition in other social domains, they might perhaps be used for those same purposes in pedagogy. It is, then, worth looking at that potential in the systems approaches themselves, including those which may not have been directly applied in pedagogy.

As regards criticality, it is mainly with the work of Churchman (1971 and 1979) and Ulrich (1983) that the *system* idea was put at its service; that is, that critique was made essentially systemic³. However, there are other uses of the system idea which can be critical themselves, complementing criticality with systems thinking rather than essentialising one by means of the other. In relation to the purposes of developing autonomy of thinking and of preventing knowledge imposition in pedagogical processes, a number of different possibilities appear for using the *system* idea. For instance, forms of first-level knowledge can be seen systemically, as sets of interrelated concepts, beliefs, or both, within a boundary, forming coherent wholes. Seen that way, students can perhaps be critical about what they include and exclude (as in boundary critique, see Ulrich 1983; and Midgley, 2000). But one can also think of the classroom as a system, and investigate what forms of organisation inside it can lead to the development of autonomy of thinking in the students. There surely are other possibilities; however, I will not choose from among them at the moment, because their study is precisely what will produce an understanding of the issues described in section 1.1.

 $^{^{3}}$ Fuenmayor (1997), however, has suggested that Kant's thought was centrally systemic, and that therefore the origins of systems thinking can be traced back to him. Given the critical character of his work, it would of course antedate any 20^{th} century work on systemic critique.

1.4 MAIN ISSUES THIS STUDY WILL SEEK TO ADDRESS

1.4.1 Main Questions

Having briefly introduced the main concerns and theoretical guides, I will now formulate more systematically the main issues this study will seek to address. They can be put in the following questions:

- 1. What critical approaches are there, in pedagogy, in relation to the problem of knowledge imposition and the development of autonomy of thinking? By means of what mechanisms do theories of the critical used by those critical approaches seek to prevent knowledge imposition?
- 2. How is the *system* idea used as a critical device in relation to knowledge imposition and autonomy of thinking? By means of what mechanisms do theories of the critical used by systems approaches seek to prevent knowledge imposition?
- 3. How, or under what conditions, can [or cannot] those forms of criticality, systemic and otherwise, prevent the imposition of knowledge and promote the development of autonomy of thinking in students?
- 4. What relation is there between the critical knowledge produced by the use of those theories of the critical, and the forms of first-level knowledge they were used on? For instance, what first-level knowledge, if any, is needed in order to produce critical knowledge?; or how does the justification of any critical knowledge produced depend on that of some form of first-level knowledge?
- 5. How can one describe the pedagogical activities in the classroom, in a systemic manner, so that a better understanding is obtained of the ways in which knowledge imposition is being prevented or allowed/ promoted? That is, what variables of analysis are relevant for understanding what goes on in a classroom in relation to autonomy of thinking and knowledge imposition?

As I see it, even though they are of interest on their own, answers to the first four questions pave the way for the fifth one. Because of that, the end result or product of this study corresponds to the answer to the last question of this list. It is a set of concepts and/or ideas—in short, a conceptual framework—from which diagnosis, research, and methodological questions can be then formulated. This further suggests that the target readers are mainly, to a certain extent, teachers, educational researchers, and educational theorists. However, given that many of the issues discussed here extend over various disciplines and transdisciplinary approaches, it might also be of interest to a wider community. In particular, it might be relevant to people interested in the other two bodies of knowledge mentioned at the beginning of this chapter—namely philosophy of language, and systems thinking—but also to people interested in any situations that involve processes other than pedagogy of knowledge construction and reconstruction.

Now, it has to be said that I am not claiming whatsoever that all sorts of knowledge imposition should always be prevented, and that all sorts of autonomy of thinking should always be developed. There may well be cases in which some form of knowledge imposition may be justified, as well as cases in which it may not be possible at all to prevent it. And for this reason, this project can again be taken as being part of a big "if... then..." In this respect, there has been some discussion concerning whether small children can acquire knowledge in an autonomous way, and therefore also concerning whether education in primary schools should bother trying to promote critical thinking in their pupils at such an early age (see Siegel, 1996; and Rorty, 1989a). As a matter of fact, when I started this project I thought I would try to avoid that debate by focusing exclusively on pedagogical issues in higher education. I do not think now that that is necessarily the best way forward. Instead of doing that, I have simply chosen to highlight the fact that it may perhaps not always be the case that the development of autonomy of thinking and the prevention of knowledge imposition should be given priority over everything else, or that it is even possible. When they are both possible and desirable, then hopefully the present project will help.

Having said that, it is worth pointing out that I would simply have never started this project if I thought that the cases in which the development of autonomy of thinking is needed were rare, or a luxury for when times are good. For instance, due to the present

circumstances of violence and harmful anarchy in my home country, Colombia, some discussions have begun to appear around the issue of whether education should be centred in discipline and obedience, or in the encouragement of self-creation and diversity. The general question whose presence I can feel in the public atmosphere, covering many more aspects of the public sphere than just education, is one about whether democratic practices are what is best in times like these. For various reasons I take it that more democracy rather than less democracy is what is needed, among which is the fact that the present situation can be described as the product of, as well as in essence, lack of democracy. But I do not want to assume here the responsibility of justifying this belief.

1.4.2 About the Philosophical Choice

Now, there is a discussion that I had left unconcluded in section 1.1.2, concerning the choice of the Quinean and Davidsonian philosophy of language for examining certain issues central to this project. Before I resume that discussion, however, I would like to clarify a main point: It would be incorrect to think that the whole study is based on that philosophical strand. Instead, it is used to explore some specific questions that will come out of an analysis of various critical approaches both in pedagogy directly, and in systems thinking. This analysis will only take two chapters (as will be seen in the explanation of the document structure, in the next subchapter); although, of course, its results are not forgotten in the subsequent developments.

Now, back to the question. Could I, or should I, have used some other alternative philosophical theory instead of the Quinean and Davidsonian one, that could have led me in a different direction? A number of philosophical alternatives seemed to be available. For instance a Foucauldian post-structuralism might have been used that focused on the way power operates in particular situations by means of various techniques and mechanisms at the micro-level, as well as on the way power-knowledge formations led to the implicit but active acceptance of particular discourses associated with particular forms of support for particular interests (see for instance Foucault, 1977 and 1980; and Gore, 1992 and 1993). Or, similarly, a Derridean deconstructionism

might have been used that focused on the way particular binary oppositions shape and define particular discourses, at the expense of precisely repressing what is represented by the silenced end of the binary opposition (see for instance Culler, 1983). Or, additionally, a Habermasian critical theory might have been used that focused on the way communication is distorted in various institutionalised or non-institutionalised ways (see for instance Habermas, 1984 and 1987; and Young, 1990 and 1992). Or there might be some others. In a way all these philosophical possibilities mentioned deal with the issue of the relations that are established, in practice, between different forms of knowledge, either in terms of silencing or of distorting mechanisms. In fact, as will be clear from chapters 2 and 3, they have been used by various critical approaches as the central elements of their theories of the critical. And as such, critical knowledge about first-order forms of knowledge is effectively produced out of them, or at least expected to be so. That is, some approaches make use of Foucault's work either to help students be able to identify and analyse power-knowledge formations, or to help teachers and researchers be more conscious of what happens in the classroom. Similarly, some approaches make use of deconstructionist ideas to help students be critical about forms of knowledge that could be imposed on them. And finally, some approaches make use of Habermas' ideas to diagnose classroom communication processes in terms of whether they promote critical thinking and avoid knowledge imposition. But that is not, as should be clear from the questions postulated in section 1.4.1, the purpose of this study. Rather, a central goal is to examine the relation that is established between forms of critical knowledge and forms of first-order knowledge, so that the former help avoid or do not help avoid, promote or do not promote, knowledge imposition in various ways. The question then is not whether these philosophical alternatives can be used to produce some kind of theory of knowledge imposition—that has already been done. The question now is whether they can be used to critically examine their own results in terms of critical knowledge produced—as well as those of other theories of the critical as applied in education, to see if the various criticisms raised can be made sense of. But, interestingly, what I wanted to interrogate was precisely the same that I would have had to assume in my own inquiry. Because of that, I needed to make use of a theory which did not serve as a basis for critique—and therefore produce critical knowledge—and which therefore did not have to take itself and the results of critique for granted. Those very theories were precisely what I wanted to interrogate.

Interestingly, for this same reason, I also take it that it would be incorrect to see my use of a Quinean and Davidsonian philosophy of language as something that replaces the use of some other philosophical theory. In fact, many of those alternatives theories have not been ignored, for they are present in the very approaches I am inquiring upon. Inevitably some of their concerns and contributions will therefore be present throughout the whole study.

1.5 STRUCTURE OF THIS DOCUMENT

I have divided all the chapters that the whole document comprises—except for the present introductory one—into five parts. Part I is a review of the existing literature on the approaches which may be of interest for this project. It comprises chapters 2 and 3, where chapter 2 provides a review of critical approaches in education, and chapter 3 of critical approaches in systems thinking. The approaches reviewed in chapter 2 are the one proposed by the Critical Thinking Movement; Paulo Freire's dialogical problemposing education; radical or critical pedagogy (other authors); post-radical approaches influenced by feminism, postmodernist and poststructuralist theorisations; Robert Young's Habermasian critical theory in education; and Jennifer Gore's Foucauldian approach. The ones examined in chapter 3 are Werner Ulrich's CSH and boundary critique, Interpretive Systemology and phenomenological critique, Stafford Beer's Team Syntegrity, and Robert Flood's and Mike C. Jackson's TSI and critical pluralism. In every case I will try to provide a description of the proposal with emphasis on the way it deals with the problem of knowledge imposition, as well as an account of the criticisms made by other authors in that respect. Part I starts to answer the first two questions postulated in subchapter 1.4. That is, they identify various approaches that exhibit a critical intent with respect to pedagogy, as well as within systems thinking, examining their contribution to understanding and tackling of the problem of knowledge imposition and the goal of promoting autonomy of thinking.

Part II attempts to delineate knowledge imposition as the object of study in this project,

and to better understand it in its relation with criticality. Chapter 4, then, describes how some aspects relate to knowledge imposition and autonomy of thinking, as well as how they appear in the various critical approaches reviewed in Part I. Included in the discussion there is also a brief comparative examination of the different objects of critical inquiry of those approaches, as well as the strategies used either implicitly or explicitly for tackling knowledge imposition. Chapter 5 examines in much more detail those strategies, to determine for what kinds of knowledge they can prevent their imposition, and how that happens. A central result of this chapter consists in the specification of the requirements that the various kinds of approaches must meet if they are to effectively prevent all forms of knowledge imposition. In general, Part II provides an answer to the third question presented in subchapter 1.4: that of how to best describe and characterise the theories of the critical associated with the approaches reviewed in chapters 2 and 3, and the mechanisms by means of which those theories of the critical seek to prevent knowledge imposition.

Part III goes on to assess whether those requirements can actually be met. Chapter 6 examines those requirements more directly connected with issues around the topics of epistemology and justification, and, more generally, of what it is to hold a reading of reality. Chapter 7 takes care of those requirements which have more to do with the topic of interpretation; i.e., with how someone understands or interprets the words of others. To do this, I will extensively use ideas imported from what Rorty has called the neo-pragmatist post-analytic philosophy of language (1991b). An explanation of those ideas will be presented at the beginning of each of those two chapters (6 and 7), to then continue to analyse in each of them the requirements formulated in chapter 5. Part III provides an answer to the fourth question presented in subchapter 1.4, and it also complements the answers to questions 1 and 3 that had been partially given in Part I. It complements those answers because by finding what requirements are not being fulfilled it can then be specified in detail what forms of knowledge imposition are not prevented, or are moreover actually promoted, by each of the types of critical approaches considered. And it is actually in the process of studying those requirements that I will examine the relations between critical knowledge and first-level knowledge that are the subject of question 4.

Part IV presents a more positive contribution towards the understanding of knowledge

imposition, by means of the construction for that purpose of basic elements of a framework. Chapter 8 will develop those framework elements which are related to issues of contents—those critical elements lying in the dimension of beliefs and belief systems—whereas chapter 9 will develop those related with issues of interactions those critical elements about how persons interact and which may in some cases bring about the imposition of knowledge. This separation between issues of contents and issues of interactions is justified by the fact that, as I will explain later in the document, although they are related and not independent, neither dimension can be reduced to the other and there will always be some residual that is not explained in terms of the other. Because of that, it may happen that by considering issues of interactions one will be at the same time considering issues of contents; but there will always remain something out of one's reach if one then does not undertake the examination of issues of contents on their own. And the same occurs with the issues of interactions when one examines issues of contents first. Part IV will be the actual end product of this study, and the answer to question 5 from subchapter 1.4: It will provide a framework that supports diagnosis, design, and intervention of pedagogical situations in relation to the prevention of different forms of knowledge imposition.

Finally Part V, only constituted by chapter 10, contains the concluding discussion. In it, I will try to summarise the main results of the study, to discuss what I think is its significance for the three domains of criticality, systems thinking, and pedagogy, and to suggest future lines of further research or inquiry. I will also try to make clear in this chapter how the five questions from subchapter were responded throughout the whole document.

PART I

2. REVIEW OF CRITICAL APPROACHES IN EDUCATION

With this chapter I start the review of the literature that concerns the disciplines mentioned in the introduction. In the following pages I will describe the work of some authors who have appropriated the notion of critique, or criticality, and have applied it in the field of pedagogy. I have attempted to provide a more or less exhaustive list of such approaches, at least as they are available in the literature in the English language. Any alternative approaches that I may have overlooked would, then, just point at a mistake on my part. Importantly, however, many of them are grouped together and covered under the same big umbrella, in spite of some differences between them. I have tried to take into account and highlight all the differences that seemed to be relevant for the issues of autonomy of thinking and knowledge imposition, and have not paid so much attention to differences of other kinds. This may be considered part of this project's own bias.

In subchapter 2.1 I will examine the work produced by authors of what has been called the Critical Thinking Movement. Now, there is some discussion within the movement about what kinds of theories of the critical are appropriate, and for that reason a description of the arguably most important alternatives proposed will be provided. However, the decision to group them all in one subchapter is justified, I think, by the fact that within the Critical Thinking Movement they are all used with a similar purpose. They would be tools with which students would be able to question forms of knowledge so that they can make their own minds up. Even though the Critical Thinking Movement has been closely related with the philosophical discipline known as Informal Logic⁴, the latter is only one, although very important, strand of thinking in what is known as theory of argumentation. Because of that I will also briefly comment

in this subchapter on the possibility and implications of incorporating other alternative theories of argumentation. Subchapter 2.2 is devoted to examining Paulo Freire's pedagogical proposal. In spite of his work being very closely related to Critical Pedagogy—of which he is sometimes regarded a founding father or a fundamental source—I will dedicate an entire subchapter to him, for two main reasons: Firstly, he has been one of the most important education theorists in recent times, and perhaps the most influential one in relation to criticality in education. And secondly, his projects in South American countries like Brazil, Chile, and Bolivia, make his work closer to my own country. Subchapter 2.3 examines the work of other authors who propose a Critical Pedagogy. As will be shown, there are large coincidences with Freire's ideas, but at one point Critical Pedagogy theorists deviate from the original path and start to create a new one with significant differences in comparison with their own earlier work and with Freire's. This is acknowledged to have occurred mainly as the result of an engagement by Critical Pedagogy theorists with postmodernist and feminist thought. Subchapter 2.4 briefly reviews work in what have come to be called Post-radical Pedagogies. Although the feminist, postmodernist, and poststructuralist forms of theorisation that inform post-critical pedagogy have also influenced critical pedagogy, here the product is somewhat different, focusing much more on the linguistic and semiotic possibilities of the pedagogical interactions. In subchapter 2.5 I will review Robert Young's work on a Critical Theory in Education, from a Habermasian perspective, and in subchapter 2.6 a final review will be made of Jennifer Gore's work on a Theory of Pedagogy, which takes elements from a Foucaudian perspective. These two last works are given separate subchapters from the rest, not because of their influence or completeness—Gore's appears just in a book and a few papers—but because they constitute approaches which are somewhat different from the others and which provide interesting new insights into the criticality in education, and into the idea of knowledge imposition.

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⁴ In fact, some theorists in one movement are also contributors to the other.

2.1 THE CRITICAL THINKING MOVEMENT

The Critical Thinking Movement has mostly seen its development in North America during the last few decades. An important premise behind all the work in this movement consists in the idea that thinking, or reasoning, can be defective, and that there are ways of improving it. Richard Paul, for instance, has remarked in this respect that "critical thinking is thinking about your thinking while you're thinking in order to make your thinking better" (1992b), and Harvey Siegel has developed the idea that reason can be educated (1988). Precursors of this idea are Aristotle's analyses of syllogistic and sophistic reasoning, and all the subsequent work in logic throughout the middle ages and up to the present time. In fact, just like in Aristotle's analyses, the work in the Critical Thinking Movement is strongly based on the development of theories of various kinds, which are formal at least in the sense that they are independent of the particular disciplines or contents about which reasoning occurs. These theories should then help to question particular forms of knowledge, and thus enable the person using them be critical about them, and decide for her/himself whether s/he should accept them. This way, Govier suggests that "a person who thinks critically is one who can follow, understand, and evaluate arguments; recognize and avoid fallacies; reason carefully; and judiciously estimate the credibility of claims" (Govier, 1997, p.292).

What critical thinking means, however, is by no means uncontroversial, and a great deal of debate has occurred in that respect. While those theories of reasoning, rationality, argumentation, or whatever is the case, are deemed necessary, it has been argued that they are not sufficient. For example, critical thinking may require dispositions and attitudes apart from the skills involved in correctly applying the theories (see Siegel, 1988 and 1993; McCarthy, 1992; and Paul, 1992), but it may also involve caring, empathy, (Wheary and Ennis, 1995), and creativity, imagination and intuition (Paul, 1993; Clinchy, 1994; and Gallo, 1994; see also the discussion by Haroutunian-Gordon, 1998). Work on these other aspects has sometimes been seen as extending the theoretical tools of critical thinking, and sometimes as showing that something beyond theory is needed.

Work of academics in this movement can therefore be seen as covering at least two different but related tasks: first, the construction of sound theories that can account for good and bad reasoning⁵; and second, the formation of students in the application of those theories as a means of improving their own reasoning skills, and in the development of associated dispositions and values. The first of these tasks is usually related to philosophical disciplines such as argumentation theory, and especially In fact, critical thinking has sometimes been described as their informal logic. educational counterpart (Siegel, 1988; and Fisher and Scriven, 1997). The second of these tasks has traditionally been taken up in North American universities by means of taught modules on formal and, more recently, informal logic. However, on the one hand there has been strong criticism about the very idea of a module on thinking without a particular content that thinking will be about (see McPeck, 1981), and on the other hand there is now a tendency to design content modules such that critical thinking is promoted along with the teaching of those contents. However, as far as I have been able to find out, there is little literature on that instructional design topic, from the critical perspective of the Critical Thinking Movement.

2.1.1 Informal Logic and Theories of Argumentation

The number of issues being discussed in informal logic is simply enormous. In what follows I will try to describe the general idea guiding its development, and comment on a few of the issues being discussed. My intention is to try to give an overview of what the general purpose and means are, in a way which is not too extensive but sufficient for my later analysis.

Informal logic appears as a variation on formal logic, trying to avoid some of its shortcomings in its applicability to real-life arguments. However, its main concern is still the logical connections between sentences or propositions in an argument, and as such it attempts to remain field or domain-independent. Now, even though Stephen

⁵ In the terminology introduced in chapter 1, these would play the role of theories of the critical.

Toulmin's work in the 1950s is considered seminal in this area, it is arguably only in the 1970s that there was a revival of the discussions. Van Eemeren et al. (1996) identify three textbooks in informal logic that may have been pioneers in this respect: Howard Kahane's *Logic and Contemporary Rhetoric* (1971), Thomas' *Practical Reasoning and Natural Language* (1973), and Michael Scriven's *Reasoning* (1976). Interestingly, Kahane's words are insightful as to the change intended:

In class a few years back, while I was going over the (to me) fascinating intricacies of the predicate logic quantifier rules, a student asked in disgust how anything he'd learned all semester long had any bearing whatever on President Johnson's decision to escalate again in Vietnam. I mumbled something about bad logic on Johnson's part, and then stated that Introduction to Logic was not that kind of course. His reply was to ask what courses did take up such matters, and I had to admit that so far as I knew none did.

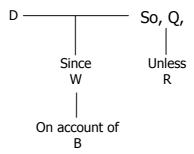
He wanted what most students today want, a course relevant to everyday reasoning, a course relevant to the arguments they hear about race, pollution, poverty, sex, atomic warfare, the population explosion, and all the other problems faced by the human race in the second half of the twentieth century. (1971, p.v)

Some different strands of research within this movement can be recognised, although they certainly do not exclude each other. I will briefly describe some of them in what follows.

The Structure of Arguments and Toulmin's Model

The author who is acknowledged to be the first to have explicitly attempted to produce a body of knowledge with similar characteristics to those of formal logic, but applicable to natural *real-life* language arguments, is Stephen Toulmin. In his book *The Uses of Argument* (1958), and particularly in its chapter III, Toulmin attempted to provide a conceptual framework with some elements that could describe the structure of natural

language arguments in a generic way—i.e., independently of the particular contents of particular arguments. The elements of the framework should be identifiable in those real-life arguments, so that it could really help in the assessment. The basic structure presented by Toulmin is the following one (1958, p.104):



The two most basic elements here are D, which stands for data, and C, which is the conclusion or the claim being argued. W stands for warrant, and it is what guarantees the connection between D and C. This way, to take Toulmin's example, for the conclusion C "Harry is a British subject", relevant data D might be "Harry was born in Bermuda". The warrant W for connecting D with C would be "A man born in Bermuda" will generally be a British subject", which in turn would be validated on account of backing B "the following statutes and other legal provisions: ...". Q is a qualifier, like "presumably" or "most certainly", and R stands for the conditions of rebuttal. R in this case would be something like "both his parents were aliens/ he has become a naturalised American/ ..." (from Toulmin, 1958, p.105). Some authors have used this generic structure for trying to teach students correct forms of reasoning and of assessment of arguments. Toulmin's own textbook An Introduction to Reasoning is devoted to this aim (Toulmin, Rieke, and Janik, 1984). Interestingly, Toulmin admitted that this work on generic structures was not enough for assessment, and that therefore complementary knowledge or information from the disciplines in which the argument being assessed was advanced was needed. The point in particular is that the appropriateness of the backing cannot be determined by purely logical analysis. This is what he called the "variability or field-dependence of the backing needed to establish our warrants" (1958, p.104).

I will not describe here work by other authors in models of arguments and criteria and values for their assessment, but it is worth mentioning the work of Scriven (1976), and Ennis (1995), as having been particularly influential in more recent times.

Fallacy Theory

Another line of development in informal logic is what is known as *fallacy theory*. Although the study of fallacies has a very long history, in modern times it is regarded as having been put back on the table by Hamblin's seminal study (1970). Now, the issue is contentious, but fallacies are normally regarded as defective forms of argumentation that somehow appear to be correct (for discussions, see Hamblin, 1970; Hintikka, 1987; Woods and Walton, 1989; Walton, 1989; and Van Eemeren et al., 1996), and lists of archetypal forms of such bad argumentation have been constructed and are widely used in textbooks: Nevertheless, there is no unique list. The provenance of some of these fallacies in the list dates far back in time, at least back to the middle ages, or perhaps even back to Aristotle. Examples of commonly known fallacies are *slippery slope*⁶, *ad hominem*⁷, and *many questions*⁸.

Importantly, as many of them are not theoretical constructions, but instead examples of bad argumentation as found in the everyday practice of argument, fallacy theory has concentrated on trying to provide explanations of where they come from, and of why they are defective. That is, if a theory of argumentation should provide accounts of what good and bad reasoning are, as well as an explanation, then they should be able to explain already well-known cases of such bad argumentation. It is interesting to note that even though the work in informal logic is generally—but by no means always—regarded as *prescriptive* rather than *descriptive* (see Siegel, 1988; and Van Eemeren et al., 1996; for an opposing view see Jackson and Jacobs, 1980), these fallacies have become something like the empirical data that theories of argumentation have to explain in order to succeed.

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⁶ As in "but, officer, I was only exceeding the speed limit by 5 km/h!", which could then go on with "but, officer, I was only exceeding the speed limit by 5 km/h more than the previous person! (10km/h in total)", and so on.

⁷ As in the comment by the Colombian General Prosecutor, some months ago, about the claim by the U.N. representative for human rights in Colombia, from Pakistan, regarding the large number of human rights abuses in Colombia and the ineffectiveness of the Government to control them: It was something like "what moral authority can she have to make those claims, if she comes from a country whose ruler is a dictator who seized power by force?"

⁸ As in "did you kill your husband because you were jealous?" when it has not been determined, or the accused has not accepted, that she killed her husband.

Now, although such explanations of fallacies in terms of theories of arguments are found in textbooks (see for instance Toulmin, Rieke, and Janik, 1984), it is acknowledged that this task has proved to be difficult, none the least because in certain contexts common fallacies may even constitute correct or valid forms of argumentation⁹. Because of this, some other authors (e.g. Van Eemeren and Grootendorst, 1992; and Woods and Walton, 1989) have proposed to treat fallacies as problems in *dialogue* procedures, rather than in the logic of arguments. (I will briefly examine some aspects of this alternative approach, which does not take logic as its object of study, but dialogue, in a later section in this subchapter.)

Dialogical Views in Informal Logic

Some authors have made dialogue a central element in their views of argumentation. Let me distinguish between two different kinds of work in this respect. On the one hand there are authors whose work is still based on logic, but argue that logical assessment can only be carried out—or perhaps is best carried out—when in comparison with alternative arguments, theories, worldviews, or forms of knowledge in general. On the other hand there are authors who have turned to models of dialogue for grounds for explaining good or bad forms of argument, or of argumentation. Logic would be here abandoned altogether in some cases, or reduced to elements of dialogue.

Connie Missimer is a theorist from the first category. She has strongly argued for an understanding of argument evaluation which as an essential feature takes into account alternative arguments in a comparative way (see her arguments in 1989, 1995a, and her textbook 1995b). In this, she has made a distinction between *isolationist* and *social* views of critical thinking, acknowledging that it is always in a social context that an argument is advanced by someone, and that alternatives to it are proposed by others. Her prescriptive proposal is also called the *Alternative Argument Theory* (1995a). Richard Paul has also advocated a comparative form of assessment, which he has called a *dialectical mode of analysis* (1992a and 1994). Interestingly Paul has also associated

⁹ For instance, as regards *ad hominem*, sometimes it is fine to question a person's authority to make claims. In trials this is sometimes a perfectly valid move.

his justification for advocating such dialectical view, with the fact that thinking, reasoning, and arguing, are basically social activities. However, whereas Missimer continues to take arguments—a conclusion with at least one reason given in its support (1995b)—as the object of assessment, Paul has suggested that that is inadequate. Given this, analyses aimed at assessing arguments, like fallacy theory, are also deemed ineffective:

A line of reasoning can rarely be refuted by an individual charge of fallacy, however well supported. The charge of fallacy is a move, however, it is rarely logically compelling; it virtually never refutes an organized way of looking at things. (1994, p.186)

For him, it is these "ways of looking at the world" or worldviews which should constitute the actual objects of assessment. For this purpose, he has sought to construct other criteria for evaluation, not so strictly tied to a proper theory. Some of these are breadth, depth, coherence, and consistency.

Rhetorics, Dialectics, and Pragma-Dialectics

Something worth noting is that Missimer's and Paul's views are dialectical insofar as they set alternative arguments or worldviews in opposition. The authors in the second category mentioned at the beginning of the previous section, on the contrary, start from the generic situation of two or more persons participating in a dialogue, in which at least one of them plays the role of protagonist P, advancing a claim and having to defend it from possible objections from an antagonist A, or more generally from an audience. That is, a difference consists in the fact that there are different persons in dialogue is indispensable here, but not for Paul and Missimer. Among these approaches are the *rhetoric* (e.g. Perelman and Olbrechts-Tyteca, 1958; Willard, 1983), the *formal dialectical* more directly derived from Aristotle's work (e.g. Lorenzen and Lorenz, 1978; Barth and Krabbe, 1982), and the *pragma-dialectical* (e.g. Van Eemeren and Grootendorst, 1984 and 1992; for a comprehensive account of all these approaches see Van Eemeren et al., 1996). They have arguably not had, however, much influence on the educational goal of the Critical Thinking Movement of getting students to be

critical. However, the fact that they take as the object of critical assessment dialogues or discussions instead of arguments specified only in terms of sentences or propositions, makes it important to provide a brief review of some of their characteristics.

The first important characteristic concerns the importance of the audience for the issue of what a good argument means. An argument is seen here as always necessarily addressed to an audience, and only meaningfully assessable as such. Van Eemeren et al. suggest that in rhetorical approaches there is a change in emphasis from *proving* to *justifying* (1996, p.191), although in my view *proving* may be too strong a word to describe work in informal logic given that uncertainty is also allowed in it. The point seems to be better expressed as a change towards an understanding of the justification of a claim as its acceptance by an audience. However, both the formal dialectical and pragma-dialectical approaches seem to be more concerned with the rules necessary for dialogue or discussion so that it can be meaningful. For instance, Van Eemeren et al. remark that

the basic assumption on which the logical propaedeutic of the Erlangen School [considered the founding work on formal dialectics] is built is that, in order to prevent them from speaking at cross purposes in interminable monologues, the interlocutors' linguistic usage in a discussion or conversation must comply with certain norms and rules. Only when they share a number of fixed postulates with respect to linguistic usage, they can conduct a meaningful discussion. (1996, p.253)

Importantly, within formal dialectics traditional elements of logic will be explained in terms of dialogical elements and norms, and so will have dialogical definitions. Barth and Krabbe (1982) have then come to propose some elementary and some non-elementary rules, labelled *critical dialogic*, designed to make the dialogue systematic, realistic, thoroughgoing, orderly, and dynamic.

The pragma-dialectical approach, developed mainly by Frans Van Eemeren and Rob Grootendorst, takes up many of the insights of formal dialectics, and then attempts to develop them further by combining them with ideas from linguistics and the philosophy of language, particularly the work of Austin and Searle on speech acts. The idea of

critical dialogue is one of the most important inherited elements from formal dialectics. However, they will change its name to critical discussion, and will attempt to make it not only meaningful, but more appropriate to promote the resolution of disagreement (Van Eemeren and Grootendorst, 1984). Similarly to formal dialectics, they will produce a set of rules that need to be complied with in order to obtain a critical discussion. These rules are the following (1992, pp.208-209):

- Rule (1) Parties must not prevent each other from advancing standpoints or from casting doubt on standpoints.
- Rule (2) A party that advances a standpoint is obliged to defend it if asked by the other party to do so.
- Rule (3) A party's attack on a standpoint must relate to the standpoint that has indeed been advanced by the other party.
- Rule (4) A party may defend a standpoint only by advancing argumentation relating to that standpoint.
- Rule (5) A party may not disown a premise that has been left implicit by that party or falsely present something as a premise that has been left unexpressed by the other party.
- Rule (6) A party may not falsely present a premise as an accepted starting point nor deny a premise representing an accepted starting point.
- Rule (7) A party may not regard a standpoint as conclusively defended if the defense does not take place by means of an appropriate argumentation scheme that is correctly applied.
- Rule (8) A party may not only use arguments in its argumentation that are logically valid or capable of being validated by making explicit one or more unexpressed premises.
- Rule (9) A failed defense of a standpoint must result in the party that put forward the standpoint retracting it and a conclusive defense of the standpoint must result in the other party retracting its doubt about the standpoint.
- Rule (10) A party must not use formulations that are insufficiently clear or confusingly ambiguous and a party must interpret the other party's formulations as carefully and accurately as possible.

Moreover, they claim that many of the fallacies that have proved difficult to explain by other means, can be actually seen as violations of the ten rules, and therefore as instances of non-critical discussion (1984 and 1992).

2.1.2 Knowledge Imposition in the Critical Thinking Movement

Attempts to Prevent Knowledge Imposition

The critical intent of promoting intellectual autonomy and preventing knowledge imposition is explicitly and very clearly manifested by authors in the critical thinking movement. For instance, Govier remarks that

Philosophers in the Critical thinking – Informal Logic movement argue that education should not be indoctrination. Students should be enabled to think for themselves rather than being trained in some kind of orthodoxy; or taught to unquestioningly follow authorities. (1997, p.292)

And McPeck has similarly argued that

It is all too common, however, for specific subject-oriented courses to permit information and authority to rule in the place of reason, and where authority reigns unreflective obedience will follow. Critical thinking, by contrast, requires knowledge of the reasons that lie behind the putative facts and various voices of authority. (1981, p.157)

This aim is in turn justified by recourse to the notion of a good citizen who can autonomously and responsibly assess the proposals put forward by politicians and participate in public debate (see for example Duhan Kaplan, 1991; Paul, 1992a and 1994; Siegel, 1995; Giarelli's, Harris', and White's essays in Kohli, 1995; and Johnson and Blair, 2000).

The main way in which this occurs has already been mentioned at the beginning of this subchapter, and it consists in giving tools to students to question the validity of all sorts of forms of knowledge they encounter, be they commercial messages in the media, politicians', teachers', etc. In this case, the emphasis on the development of formal generic tools which are not field or discipline-dependent, suggests a way of guaranteeing their impartiality and fairness for assessment. These would be, in any case, tools for students to incorporate and then go on to use in their everyday situations.

However, the work of the dialecticians and pragma-dialecticians suggests another possible alternative strategy for tackling knowledge imposition, even if it has not been made explicit: If somehow the classroom activities can be organised so as to produce *critical discussions*—in the sense given to this expression by pragma-dialecticians—then those discussions would effectively be a step forward towards the achievement of a teacher-students relationship dominated by rational procedures rather than by the force of authority. It needs to be clarified that this may not have been the original intention of the authors in these traditions. And, furthermore, some additional features would have to be integrated so as, for example, to guarantee that the roles of protagonist and opponent can be both occupied freely and flexibly by all the students as well as the teacher.

Criticisms Related to Knowledge Imposition

There has been some discussion concerning the status of the theories used by authors in the Critical Thinking Movement. The point is, if these theories are used to justify or to properly assess arguments and their conclusions, how to assess or justify those very theories? (see Siegel, 1988 and 1996; Walters, 1994, Alexander, 1996; Bilow, 1997; Macmillan, 1997, Robertson, 1997). Siegel has recurred to the traditional argument of inconsistency in the attacking position: When one argues that the theory cannot be justified, one is already using it (see Siegel, 1987). Paul has used a somewhat different strategy: He claims that a person is deemed critical or not, not depending on *what* views s/he holds true but on *how* s/he holds them (Paul, 1994). The importance of this issue for knowledge imposition consists in the fact that in order to prevent it, teachers

would have to inculcate (indoctrinate) students with the theories of argumentation.

Another criticism made points at a perhaps more important concern. Laura Duhan Kaplan, an author committed to Critical Pedagogy (see subchapter 2.3), has argued that there is a risk, structurally incorporated in the Critical Thinking approach, that students will learn to simply legitimise their own views of reality by making use of a fancy terminology (Duhan Kaplan, 1991). That is, instead of fair-mindedly reflecting critically both on their own views and on other people's, students might use the tools to achieve a better position in processes of knowledge construction and get their views accepted by the other parties more easily. Indeed, she has shown how a textbook in informal logic for undergraduate students systematically takes claims advanced by conservative politicians as examples of bad argumentation, whereas claims by liberals are used as examples of the opposite case. A similar criticism has been launched from within the movement as well by Richard Paul. For him, students come to the classroom with already acquired patterns of thinking and beliefs that are deeply egocentric and sociocentric. Critical thinking should, in principle, help them reflect critically on those beliefs. However, he remarks that

those students who already have sets of biased assumptions, stereotypes, egocentric and sociocentric beliefs, taught to recognize bad reasoning in neutral cases (or in the case of the opposition) become *more* sophistic rather than less so, more skilled in rationalizing and intellectualizing their biases. They are then *less* rather than *more* likely to abandon them if they later meet someone who questions them. Like the religious believer who studies apologetics, they now have a variety of critical moves to use in defense of their a priori egocentric belief systems. (Paul, 1992a, p.136)

Paul, however, suggests that the way to overcome this problem is to systematically address issues about which students may have deeply incorporated beliefs, and even some emotional investment. However, a point that is revealed with the criticisms is that the use of the tools provided by the Critical thinking approach does not yield straightforward and uncontroversial results, and that this space allows for its non-neutral use in practice. Haroutunian-Gordon has documented part of a discussion concerning the neutrality of standards of thinking and the role of logic in them (1998). She

suggests that there is agreement now about the insufficiency of, but nevertheless need for, neutral standards: Non-neutral, historically and culturally determined standards, would also play an important role in the actual assessment of arguments. This last point is further related to something else that has been already mentioned, which is Toulmin's claim that not all dimensions of the assessment are logical and that part of it is necessarily field-dependent. Someone who has sharply criticised the approach based on this idea is John McPeck. In a book and some widely discussed papers (1981, 1992, and 1994), he has claimed that the very idea of teaching thinking, in a vacuum, separated from the contents of that thinking, is unintelligible. The point is also related to the claims described in the introductory paragraph to this subchapter, regarding the fact that critical thinking is not only about logic—and the logical tools that can be produced—and that other skills and values might also be needed. In any case, Duhan Kaplan's criticism is still something to pay attention to, insofar as it needs to be clarified that perhaps a person who has learnt to use the tools offered by the Critical Thinking Movement is not necessarily someone whose views are [more likely to be] more valid.

A last point worth mentioning here has also been put forward by Duhan Kaplan. She has argued that the approach assumes that the messages to question are given, transparent, and hence unproblematically identified (1991). However, this assumption does not take into account hidden or subtle messages, conveyed in less explicit ways. There is also a different criticism which nevertheless I want to relate to the previous one. This new criticism points at the failure of the approach to contextualise arguments and forms of knowledge in general, in the wider social and political events and situations in which they are produced or actively used (see Giroux, 1994a; and Burbules and Berk, 1999). That is, these would be critical questions that would not be asked or considered by just following the recommendations of the Critical Thinking Movement, because they "may escape the net of strict logical analysis" (Duhan Kaplan, 1991, p.217). These contextual political aspects would be part of what a form of knowledge conveys, at least in that its acceptance or rejection would have social and political implications, but they are somehow hidden from view, and therefore not explicit in the message. It would be the task of critique, according to these authors, to disclose those aspects.

2.2 PAULO FREIRE'S DIALOGICAL PROBLEM-POSING EDUCATION AND CONSCIENTISATION

Certainly Paulo Freire was one of the most influential theorists in contemporary educational theory and practice, and continues to be so even after his death in 1997¹⁰. Freire's general project was one of liberation for the masses that are oppressed by the minorities in power, in societal systems which structurally maintain these relations of oppression. He saw his educational efforts as raising the consciousness of the oppressed, transforming it so that it could become critical. But the achievement of a critical consciousness is still not enough to liberate the oppressed; it would only be a first step. Oppression, for him, can only be overcome if the material conditions that cause it are changed:

The oppressed must confront reality critically, simultaneously objectifying and acting upon that reality. A mere perception of reality not followed by this critical intervention will not lead to a transformation of objective reality. (1972, p.37)

In the domain of socioeconomic structures, the most critical knowledge of reality, which we acquire through the unveiling of that reality, does not of itself alone effect a change in reality. (....) A more critical understanding of the situation of oppression does not yet liberate the oppressed. But the revelation is a step in the right direction. Now the person who has this new understanding can engage in a political struggle for the transformation of the concrete conditions in which the oppression prevails. (1994a, pp.30-31)

However, it would not be just one simple step, but a crucial one; because "one of the gravest obstacles to the achievement of liberation is that oppressive reality absorbs those within it and thereby acts to submerge men's consciousness" (1970, pp.26-27).

¹⁰ For a detailed biography and chronology of Freire's works situated in historical context, see Taylor, 1993; and Torres, 1993.

In the following sections of this text, I intend to review part of this work, to examine how criticality is expressed in it and how knowledge imposition is conceptualised and dealt with.

2.2.1 Overview of Freire's Method

Most of the projects Freire worked on were adult literacy programmes. However, as will be clear from the discussion below, this was not restricted to the technical skills of knowing how to read and write, but also and mainly comprised an understanding of the world in which the students' lives occur. This understanding of the world is, for Freire, mainly a political reading of society and their place in it. One implication of this is that the skills of reading and writing are acquired through the study of certain words and texts that represent relevant political themes in the students' lives, which at the same time are used for a reflection on them (see, for instance, Freire, 1972 and 1973; Freire and Macedo, 1987; and Taylor, 1993). The political dimension in Freire's work is arguably drawn from a Neo-Marxist theorisation, in which society and rationality appear divided according to a distinction of class. And in this sense, it can be said that in his texts *oppression* mostly refers to class oppression.

In *Pedagogy of the Oppressed*, Freire outlines the process (1972, mainly pp.101-114). First, researchers go to the area where the educational programme will take place, and attempt to grasp the reality of the situation present there by means of observation of behaviours, language, and events, and also through informal conversations with the people. In a second stage, the researchers discuss their findings, to reveal the contradictions present in the situation. Then they investigate the people's level of awareness of those contradictions. Following this, the researchers choose some themes which will constitute the codified representations of the situation, to then present them to the students. According to Freire these codified representations should be neither too enigmatic nor too obvious, for something too enigmatic would leave the students guessing what it is that the researcher wants to hear them say, and something too obvious would be manipulating instead of being challenging. The purpose of this is to

start a conversation with the students about their reality, encouraging them to pose it as a question to be answered rather than as something fixed to be accepted. As I will show below, this conversation takes the form of a dialogical problem-posing pedagogical practice, and takes place in what are called *culture circles*, which would be spaces where life and society are inquired upon by the students, together with the teacher-researcher, in a non-hierarchical manner.

2.2.2 Politics and education

One of Freire's main concerns was the relation between politics and education, and particularly the role education and pedagogy actually have—or potentially could have—either in giving support to societal structures of oppression or in changing them so that a more egalitarian society is achieved. He further thinks that acting as if this relation did not exist can have harmful political consequences. In this respect, a distinction between naïve, astute, and critical educators was made by Freire to clarify his point: The first two act as if education were politically neutral, but whereas the naïve educator does it because s/he does not know that it is not, the latter does it to disguise the fact that through education s/he is reinforcing the same relations of domination and reproducing the oppressor's culture. The critical educator knows—just like the astute educator—that education is not neutral, but s/he affirms this politicity, makes it explicit, and works with it (Freire and Macedo, 1987, ch.2). Freire puts the point very clearly:

Education has politicity, the quality of being political. As well, politics has educability, the quality of being educational. Political events are educational and vice versa. Because education is politicity, it is never neutral. When we try to be neutral, like Pilate, we support the dominant ideology. Not being neutral, education must be either liberating or domesticating. (Freire, 1994b, p.189)

Now, in my reading of Freire's texts there are various different senses in which education is said to be political, and hence in which it can be used for political purposes.

In what follows I will try to show those different meanings. For this purpose, I have divided the discussion into two parts: The first one concerns the political and ideological nature of *what* is taught, and the second one concerns the political and ideological consequences of *how* the teaching takes place.

Teaching and Unveiling Ideologies

In Freire's texts there are numerous references to specific forms of knowledge with which the students are said to be inculcated in the education promoted by the dominant groups in power, and whose acceptance would reinforce the existence of relations of oppression. Among these beliefs would be some about unjust types of society being justifiable (for instance held because of having been "cheated in the sale of their labour", in Freire, 1972, p.35; see also p.29), about it being compelling or desirable to try to be like the oppressor (pp.48-51), about it being God's will that there be oppression (pp.47-48; also 1994a, ch.1), or about more specific things like the fact "that unemployment in the U.S. is caused by 'illegal aliens' who take jobs away from native workers, instead of seeing high unemployment as a policy of the establishment to keep wages low" (Freire, in Shor and Freire, 1987, p.36). It is also important to notice that Freire has already declared invalid the forms of knowledge that represent those messages, as is apparent from the expressions he uses to refer to the mind that holds them and/or to the way it holds them: naïve consciousness (Freire, 1973), false perception, false consciousness, submerged consciousness, and mythological mind (1972), among others.

A critical education, on the contrary, would directly unveil and point out the falsity of those messages, as well as the existing societal oppressive structures. It would help students develop in a truer or less mythological way, an understanding of the reality they live in, and of the way their lives are affected by it. In *Education for Critical Consciousness* (1973) Freire has described how students are helped challenge their own beliefs about the reality of society and of their own lives. Taylor (1993) has further analysed thoroughly how this happens, and specifically how students are taken through the specific path that leads them to come to recognise particular messages taught by the

dominant groups and the oppressors, and to question them on the basis of a new inquiry into reality led by the teachers. In this respect, an anecdote is also revealing of this process. After some questioning, a peasant in a culture circle finally comes to recognise that the cause of all his suffering was "the boss". Freire then concludes that

from that point of departure, we could have gotten to an understanding of the role of the "boss", in the context of a certain socioeconomic, political system—gotten to an understanding of the social relations of production, gotten to an understanding of class interests, and so on and so on. (1994a, pp.48-49)

It is through the process that gets the student to that understanding mentioned by Freire, that the ideologies taught by the oppressors can be questioned. It is worth noticing, however, that at the same time in that process new beliefs are created in the students, about socioeconomic and political systems, their roles in them, class interests, etc. This positive conception of criticality—in the sense that it entails the adoption of certain beliefs by the students who are becoming critical—is also related to the relation that Freire postulates between *reading the word* and *reading the world*. Even though a specific project may be a literacy programme designed to eradicate illiteracy, in the act of reading and writing words the students would also and most importantly be, according to him, reading—understanding, interpreting—and writing—acting in, changing—the world (Freire and Macedo, 1987). In Freire's own words,

The act of reading cannot be explained as merely reading words since every act of reading words implies a previous reading of the world and a subsequent rereading of the world. There is a permanent movement back and forth between "reading" reality and reading words —the spoken word too is our reading of the world. We can go further, however, and say that reading the world is not only preceded by reading the world, but also by a certain form of writing it or rewriting it. In other words, of transforming it by means of conscious practical action. (1994b, p.189)

Because of this, for example, the words chosen by Freire and his collaborators to teach the reading and writing skills are taken from among those that, in their judgement, represent existential themes in the students' lives and are of a political nature (Freire, 1972; Taylor, 1993). This way, the technical skills are formed at the same time that a political understanding of their reality is developed in the students. Interestingly enough, the separability of these two aspects of literacy—the political and the technical—is to a certain extent evidenced in the mixed results of a large literacy campaign in Guinea-Bissau, as accepted by Freire himself (see Freire, 1978; and Freire and Macedo, 1987). In one sense it was clearly unsuccessful: It failed to teach the technical skills of reading and writing to most of the target population. In another sense, it was said to be a success: The students' social and political consciousness was said to have been raised, as they stopped being "naïve". As one of his students claims, "before, we did not know that we knew. Now we know that we knew." (Freire, in Freire and Macedo, 1987, p.114).

Learning and Changing Societal Roles

The politicity of education also appears in Freire's texts through the definition of the roles that teacher and students play. The worst case is that of situations in which students from the oppressed group in society are treated as only receptacles of information. In such cases the educator would be numbing their ability to reason critically, to take up the challenge of getting to understand their reality. By doing that, the dominant groups would be making sure that the masses will not think by themselves and perhaps realise that the actual present order can and should be changed. In this sense, the revolutionary leaders from the Left would be making the same mistake when they take the role of the ones who think for the people, instead of enabling them to think by themselves. In this respect, Freire postulates *banking education* as what he says is characteristic of education for domination. A banking education is one that establishes as its purpose the transmission of predefined knowledge, from the teacher to the passive students, taking knowledge to be equivalent to an accumulation of information. This account is developed as expressed in the following ten characteristics (Freire, 1972, p.59):

- a) The teacher teaches and the students are taught.
- b) The teacher knows everything and the students know nothing.

- c) The teacher thinks and the students are thought about.
- d) The teacher talks and the students listen-meekly.
- e) The teacher disciplines and the students are disciplined.
- f) The teacher chooses and enforces this choice, and the students comply.
- g) The teacher acts and the students have the illusion of acting through the action of the teacher.
- h) The teacher chooses the programme content, and the students (who were not consulted) adapt to it.
- i) The teacher confuses the authority of knowledge with his own professional authority, which he sets in opposition to the freedom of the students.
- j) The teacher is the subject of the learning process, while the pupils are mere objects.

In banking education, then, the notion of learning would be an alienating memorisation and verbalisation which

turns [students] into 'containers', into receptacles to be filled by the teacher. The more completely he fills the receptacles, the better a teacher he is. The more meekly the receptacles permit themselves to be filled, the better students they are. (p.58)

In this sense, students are not expected to name the world, to learn to develop their own way of reading it, but simply to take a naming of it which has already been defined, and which is transmitted by the teacher.

So, according to this, it is the capacity that education has for enabling people to think by themselves that would constitute its political property. The privileged would not want the oppressed to do so, because this would lead them to resist the established order. By numbing students, they now accept the present state of the world as a given, as something fixed and static that cannot or should not be changed. A classroom in which the students are not allowed to talk, let alone talk back, and only the teacher's voice is heard, would be a configuration with political consequences in that it would be implicitly showing the students their place in society, and would not allow them to think

and possibly challenge and change the world they live in. As Freire puts it, "in their political activity, the dominant elites (...) encourage passivity in the oppressed" (1973, p.84).

2.2.3 Conscientisation and Critical Awareness

The notion of *conscientisation* takes a central political role in Freire's proposal, and I take it to represent his response to the political issues of education which are related to the unveiling of the ideologies inculcated by the oppressors, and of the structures of social reality that produce or support oppression. In general terms, conscientisation can be seen as the process gone through by a person who has developed a critical consciousness. In Freire's words, "*conscientização* represents the development of the awakening of critical consciousness" (1973, p.19).

A characterisation of the process includes three different historically and culturally determined levels of understanding that students should go through, as stages in the process (1973, pp.17-20). The first stage is that of *semi-intransitive consciousness*, characterised by a very limited perception and understanding of reality, mostly based on issues of survival. In the second stage, *naïve transitivity*, people engage with the world around them and are able to acknowledge the existence of many more relevant issues about their situation than those implied in mere survival, but they are explained in an oversimplified, fanciful, and magical way. The fundamental characteristic of a magical explanation would be that of failing to grasp the causal relations in a social situation (1973, p.44). The last stage, *critical transitivity*, implies a deep and holistic understanding of reality, which includes an understanding of its causes, as well as a dialogical attitude of openness and a will to revise one's knowledge.

Different elements can be highlighted in what it means to have a critical understanding of reality. A first one concerns whether the person understands situations in the social world as fixed and static, or on the contrary as what Freire calls *limit-situations*; that is, as situations that can be transformed by human action. The process of conscientisation

would take someone from the former kind of understanding to the latter, and this implies that, because s/he regards the world as something to be created and recreated, s/he should then become an active participant in the transformation of the world. A second element is the knowledge of oppression and its conditions: In naïve understanding, a person would see the oppressor as a model, would have internalised her/his image in him/herself, and would want to become like him/her. The oppressor is, curiously enough, someone who is hated and admired at the same time. In a later stage, they would be able to recognise the oppressor outside of themselves. That is, the oppressed now see the oppressor as someone who is actually producing the situation of oppression. Once conscientised, the oppressed can further see holistically the causes of oppression at societal levels, and this understanding enables them to act in the real world in an effective manner to overcome that oppression. In Freire's words, "the more accurately men grasp true causality, the more critical their understanding of reality will be" (1973, p.44).

2.2.4 Dialogical Problem-Posing Education

A dialogical pedagogy will become Freire's proposal to tackle the second sense of the politicity of education, namely that related with the roles of teacher and students and the relation established between them. It is defined as the antithesis of banking education, and in it students would be actual partners in the conversation whose aim is inquiry into reality. The relation is established in such a way that the teacher does not impose his/her views and ideology on the students. They are allowed and encouraged to become subjects of the learning process, and not simply its objects. If one central aspect of banking education was the treatment of learning as filling up someone's head with information, in Freire's proposal learning is an act of cognition carried out by students and teachers together dialogically. In Freire's terms, the teacher-students contradiction is dissolved, and "the teacher-of-the-students and the students-of-the-teacher cease to exist", to give room to the "teacher-student with students-teachers". In general, dialogue would be

the encounter between men, mediated by the world, in order to name the world. Hence, dialogue cannot occur between those who want to name the world and those who do not want this naming—between those who deny other men the right to speak their word and those whose right to speak has been denied them. (1972, p.76)

Freire, however, is not very clear about the conditions that pedagogical interactions must fulfil in order to be dialogical. He does mention some aspects, which are stated in terms of values. The first is love for humans and for the world, which would imply commitment to the cause of liberation for the oppressed (ibid., p.77). The second is humility, which implies a recognition of one's finite and fallible capacities and knowledge: "How can I enter into a dialogue if I always project ignorance onto others and never perceive my own? How can I enter into dialogue if I regard my case apart from other men?" (p.78). Faith in the human capacity of creating and re-creating would be the third condition. Without faith in them, the teacher might transform students into objects, thus negating their ontological vocation of becoming active subjects (p.79). Additionally, there are mutual trust, hope that dialogue and struggle will lead to improvement, and *critical thinking*. Faith and humility are perhaps the conditions more clearly related to dialogue in terms of distinguishing it from other kinds of conversations. Humility would open the possibility that one might get changed by the conversation, by what the others contribute to it, by recognising that the other's knowledge may be useful for improving one's knowledge. Faith in the others would correspond to the belief that they will be reasonable in the development of their readings of reality, as well as in their judgement of one's own. It is the recognition of their rationality and reasonableness.

This form of dialogue is taken to result in the students' development of their own language, of their own reading of the world, which may be different from the educators':

Here is one of the tasks of democratic popular education, of a pedagogy of hope: that of enabling the popular classes to develop their language: not the authoritarian, sectarian gobbledygook of 'educators', but their own language—which, emerging from and returning upon their reality,

sketches out the conjectures, the designs, the anticipations of their new world. Here is one of the central questions of popular education—that of language as a route to the invention of citizenship. (1994a, p.39)

2.2.5 Knowledge Imposition in Freire's Dialogical Problem-Posing Education

Attempts to Prevent Knowledge Imposition

The political nature that Freire claims education has, is directly related to the issues of knowledge imposition and reasoning autonomy. On the one hand, his idea of critical consciousness represents a state of understanding in which the oppressors' ideologies have stopped being imposed on the students, as they have now acquired the capacity to identify and question them. The forms of knowledge whose imposition is prevented are represented by what Freire sees as false, naïve and/or distorted understandings of the reality the oppressed live. The sources of that knowledge being imposed can then be said to lie outside of the classroom, and usually in particular in the teachings of the minorities in power. A Freirean education presumably liberates the students from that form of knowledge imposition.

The other form of imposition that Freire's proposal attempts to prevent lies directly within the confines of the classroom interactions. It is the imposition of the teacher's views that is sought to be avoided, and instead the idea is that students become active subjects of the processes by which they acquire knowledge. This in itself would be an analogy of the role they would play in the outside world, and actually also a preparation for it. In this case, the concept of dialogue is what becomes of central importance, and no specific forms of knowledge to be identified and questioned are mentioned. In practice, the non-imposing dialogical pedagogy proposed became concretised in the so-called culture circles.

Criticisms Related to Knowledge Imposition

There have been a number of criticisms concerning the imposition of knowledge in Freirean educational practice. In particular, at the same time that the teacher-researcher helps the students question some knowledge, s/he also inexorably leads them to believe certain specific ideas, which are brought into the classroom conversation by her/him, and which have their origin in a Marxist theorisation of the social, the political, and the economic. This way, for instance, Taylor has noted that the order of the images—the codified representations—put in front of the students so that they start reflecting on their own reality, carry with them an implicit message that already specifies what is to be believed about it (Taylor, 1993). Moreover, he claims that some patterns that appeared in the peasant-students' responses seem too unlikely so as to have emerged without a further push from the teachers (ibid.). Illich has suggested, more generally, that "conscientization [refers to] all professionally planned and administered rituals that have as their purpose the internalization of a religious or secular ideology" (1982, p.158). This internalisation is an uncritical adoption of certain ideological beliefs inculcated by the teacher. Burbules has also noted that in Freire's work there is "a latent assumption that the teacher should lead students to particular conclusions of belief and action" (1993, p.23). Elias has perhaps made the point even clearer (1994):

The weakest part of Freire's theory is his theory of political revolution. Learning for Freire is subordinated to political and social purposes. Such a theory is open to the charge of indoctrination and manipulation. The process of conscientization entails for Freire a radical denunciation of dehumanizing structures, accompanied by the proclamation of a new reality to be created by humans. Freire is confident that this will come about through free dialogue in which learners and educators participate as equals. Yet is there not a subtle manipulation built into this method, given the lack of education in the students and the obvious political purposes of the teachers?

The list of authors similarly suggesting the presence of knowledge imposition in Freirean theory and practice extends considerably (some of these are quoted by Ohliger,

1995). These readings are supported by the analysis provided here, and specifically by the realisation that conscientisation involves the acquisition of certain specific beliefs about the object of inquiry, beliefs which are of a Neo-Marxist nature.

Now, there are mechanisms, also pointed out in the literature, by means of which this imposition is supported and legitimised. Freire's idea that domination itself puts to sleep the oppressed's capacity to see reality, provides a circular argument which places those who are theorised in it in a dilemma¹¹. It starts with the knowledge that somebody, let us say an educator, has about others, in which s/he says that they are in a condition of oppression. This knowledge not only refers to the condition of oppression in which the others are, but also to how this very condition handicaps them so that they cannot clearly see reality. In this respect, Freire claims that

one of the gravest obstacles to the achievement of liberation is that oppressive reality absorbs those within it and thereby acts to submerge men's consciousness. Functionally, oppression is domesticating. (1972, p.36)

And similarly, that

Submerged in reality, the oppressed cannot perceive clearly the "order" which serves the interests of the oppressors whose image they have internalized. (p.48)

Now, this implies that if the presumably oppressed immediately agree with this knowledge presented to them about the condition of oppression and its causes, then the educator's knowledge will have been confirmed as valid. If they do not, then the conclusion is that they cannot see the truth because of their very oppression or alienation. For instance, Freire says that "the fact that individuals in an area do not perceive a generative theme, or perceive it in a distorted way, may only reveal a limit-

¹¹ I am taking the word dilemma to mean what it did in the Ancient Greek context which can be illustrated with the brilliant story of Protagoras and Euathlus. "A story is told of the time Protagoras demanded his fees from Euathlus, a pupil of his. Euathlus refused to pay, saying, 'But I haven't won a victory yet'. Protagoras replied 'But if I win this dispute, I must be paid because I've won, and if you win it I must be paid because you've won"" (in Lyotard, 1988, p.6).

situation of oppression in which men are still submerged" (1970, p.76). The generative themes are presumably discovered by the students; but it is the educator who can assess whether they have been perceived, and whether this has occurred in an undistorted way.

David Buckingham has reached the same conclusion, although about radical pedagogy in general (1998, p.5):

The crucial problem, of course, is what happens when students resist or reject the 'emancipation' that is provided. What if they do not want to be 'liberated' or 'empowered' in the way that the teacher has envisaged for them? One familiar way of resolving this dilemma is through recourse to a notion of false consciousness; because they are seen to be mystified or deluded in some way, the students are unable to realize their own true interests, and the teacher must therefore act on their behalf. This approach has the advantage of being a self-confirming argument: the more students resist, the more they are seen to be in need of ideological remediation, and the more the teacher's intervention and authority are justified.

Interestingly, Buckingham's point is evidenced in the differential way in which sabotage by students on the classes is treated, depending on the kind of pedagogy being targeted. Freire suggests that sabotage on critical liberatory classes is something that should be controlled, even punished (in Shor and Freire, 1987, p.103), while he supports Shor's comment that sabotage to traditional [banking] classes is a manifestation of rebellion against domination, tradition, power, and imposition (p.124).

Freire was to some extent aware of the risk of imposing knowledge in a well-intentioned educational process, as can be seen from the strong criticisms he posed at the revolutionary leaders who do not have faith in the people they fight for. He was also aware of "the contradiction we deal with in liberating education"; that in which the educator committed to this kind of pedagogy "must try to convince the students and on the other hand [s/he] must respect them, not impose ideas on them" (Freire, in Shor and Freire, 1987, p.33). But he does not seem to have been able to overcome this contradiction, and hence his theory and practice remain prone to knowledge imposition.

Another criticism has been advanced mainly by feminists, although other authors have also joined. The problem lies in the fact that Freire seems to believe that he can know the situation of oppression and point it out for any other person who is suffering it, regardless of the position in the social structure that s/he occupies—and thus regardless of how different it might be from Freire's. Weiler, for instance, argues against his "assumption that he can name 'correct pedagogical practice' for women", and complains that he ignores "different forms of oppression and privilege of black and white women, for example, or the differences between working class and bourgeois women, or the different positionings and interests of lesbian, bisexual, and heterosexual women" (1996, p.369). Brady has also highlighted some exclusions present in Freire's work, and particularly the fact that "not only are women erased in [his] language of domination and struggle, there is no attempt even to acknowledge how experience is gendered differently" (1994, p.143). Along a similar line, Gur Ze'ev argues that "implicitly, Freire contends that the interests of all oppressed people are the same, and that one general theory exists for deciphering repressive reality and for developing the potentials absorbed in their collective memory" (1998, p.467).

On the one hand these criticisms suggest the point already expressed here before, regarding the imposition of a certain patriarchal ideology, both in theory and practice. On the other hand, and this is a new point, they are also suggesting that certain forms of oppression that are not already identified in Freirean theorisation, are not made visible throughout his pedagogical process or conscientisation.

2.3 Critical Pedagogy

Even though Freire's proposal can be regarded as one version of critical—or radical—pedagogy, I have dedicated one whole subchapter to examine it and have left the contributions by other authors to another subchapter, namely the present one. Here I will concentrate mainly on the work of the arguably two main proponents of contemporary critical pedagogy; namely Henry Giroux and Peter McLaren, but will also explore some other issues put forward by other critical pedagogy as well as feminist and

cultural studies authors, who share at least certain fundamental ideas related to knowledge imposition and criticality. Actually, many aspects of their theorisation in critical pedagogy are quite similar to aspects in Freire's work, and therefore I will simply point at them without explaining them thoroughly. Instead, I will concentrate on those aspects which constitute a development away from Freire's proposal.

Despite the large number of academics working within this strand of thinking and the variety of their proposals, McLaren has actually enumerated a number of ideas which he deems constitute a common core and therefore all of them advocate:

Pedagogies constitute a form of social and cultural criticism; all knowledge is fundamentally mediated by linguistic relations that inescapably are socially and historically constituted; (...) social fact can never be isolated from the domain of values or removed from forms of ideological production as inscription; the relationship between concept and object and signifier and signified is neither inherently stable nor transcendentally fixed and is often mediated by circuits of capital production, consumption, and social relations; language is central to the formation of subjectivity (...); certain groups in any society are (...) unjustly privileged over others (...); oppression has many faces (...); power and oppression cannot be understood simply in terms of an irrefutable calculus of meaning linked to cause and effect conditions (...); domination and oppression are implicated in the radical contingency of social development and our responses to it. (McLaren, 1996, pp.125-126.

For critical pedagogy authors, pedagogy is, therefore, political, in largely the same way that Freire suggests it is. Giroux says, for instance, that it "is inextricably related to a number of social and political factors. Some of the more important include: the dominant societal rationality and its effect on curriculum thought and practice; the system of attitudes and values that govern how classroom teachers select, organize, and evaluate knowledge and classroom social relationships; and, finally, the way students perceive their classroom experiences and how they act on those perceptions" (Giroux, 1979, p.16). However, the way this politicity is conceptualised and expressed has changed throughout the years, as these authors have started to become influenced by

feminist and postmodernist theorisations. In the following section I will describe some aspects of the early theorisation of critical pedagogy, and in passing I will also point at commonalities with Freire's work. In a later section I will explain in detail the more recent developments that have been made, and that have different and important implications for criticality, as well as for autonomy of thinking and knowledge imposition.

2.3.1 Early Critical Pedagogy

Throughout the 70s and early 80s, a number of academics like Michael Apple, Leonard Bernstein, and Bowles and Gintis, apart from Paulo Freire, investigated the various ways in which education helped maintain and reinforce the inequalities present in society. Much of this theorisation, as Giroux notes, was highly pessimistic and dominated by a view of the individual as being determined by those denounced societal structures. Here one of the first important contributions by Giroux appears, in the form of the distinction between a *language of critique* and a *language of possibility* (Giroux, 1980a, and 1983a)¹². According to him, both languages are necessary for a pedagogy that has the intention of helping students overcome oppression. The language of possibility is, however, what drives the desire to change the world.

The political nature of pedagogy, as postulated by critical pedagogy authors, takes them to investigate the relations between the individualities of teacher and students, and the broader societal situations within which pedagogical practices occur. Because of this, to a great extent the contents around which classroom activities occur are explicitly political in their proposal. Criticality and its relation with knowledge imposition are also defined here, like in Freire's proposal, in terms of how particular forms of knowledge are questioned. Critical thinking is seen as "the ability to step beyond commonsense assumptions and to be able to evaluate them in terms of their genesis, development, and purpose" (Giroux, 1979, p.26). But this evaluation is an essentially political one, which takes into consideration and investigates the interests that underlie

¹² Giroux's language of possibility is closely related to Freire's idea of a pedagogy of hope (1994a).

and give rise to the particular forms of knowledge that are in question at a given time, and therefore establishes a link with social dynamics at a wider level. In fact, critical pedagogy has been seen as only part of a broader project of emancipation, which would not be complete without acting in and on the world. Emancipation would thus be "both an understanding as well as a form of action designed to overthrow structures of domination" (ibid.)

Another point worth mentioning consists in the role of truth in this early theorisation, which again resembles Freire's theorisation. Interestingly, Giroux argued that the ideology critique associated with the pedagogy he proposed "involves more than critically analyzing modes of knowledge and social practices in order to determine whose interests they serve", and that it "also identifies the contents of the ideologies in question and judges the 'truth or falsity of the contents themselves'" (Giroux, 1983b, p.76). In fact, he, like Freire, claims that education supports either emancipation or domination. The critical thinking developed in students by means of a critical pedagogy would take the first line of action, using classroom knowledge to "break through mystifications and modes of false reasoning" (1979, p.23), as well as helping students "recognize the interest structure that limits human freedom, while simultaneously calling for the abolition of those social practices that are its material embodiment" (1983b, p.80). This way, for students to be declared critical, they must be able to acquire a certain form of knowledge which is not a "mystification", and which further includes an awareness of the interest structure in which forms of knowledge are produced.

One kind of belief is targeted more specially by critical pedagogues as what has to be replaced as a result of their work. This is the idea, attributed by Giroux to the culture of positivism, that the world is fixed, static, and something to be learned to live with rather than something to be transformed. He remarks that in this ideology, economic, political, and social structures "appear to have acquired their present character naturally, rather than having been constructed by historically specific interests" (1979, p.13). This way, a core element of critical thinking would be constituted by the belief that social structures are not fixed or natural.

A last point which is also similar to Freire's pedagogical proposal consists in the fact

that attention is not only paid to how students deal with the forms of knowledge they receive from all sorts of sources in society, and to what form of knowledge is constructed by them. It is also argued that the political nature of pedagogy is also manifested in the relationships established between teacher and students. Now, let us recall that in Freire this dimension was not clearly specified, and no specific tools were provided for that purpose. In other critical pedagogues' texts, it seems to me that this is even more lacking, with a few exceptions (see Shor and Freire, 1987, and Shor, 1992). Interestingly, this may be related with the fact that various authors in this movement complain about the superficiality of various teachers' appropriation of critical pedagogy, simply translating it as a method to organise classroom interactions, thus ignoring its radical nature (see Aronowitz, 1993). But actually this has been a constant preoccupation for Giroux, as is evidenced by his insistence that "any progressive notion of learning must be accompanied by pedagogical relationships marked by dialogue, questioning, and communication" (Giroux, 1979, p.24), that critical pedagogy should "call for modes of criticism that promote dialogue as the condition for social action" (1986, p.139), and that "regardless of how politically or ideologically correct a teacher may be, his or her 'voice' can be destructive for students if it is imposed on them or if it is used to silence them" (1986, p.142). However, it is my opinion that this dimension is still not sufficiently developed so as to provide effective tools for inquiring into the existence or not of dialogical conditions in particular situations. And it is perhaps this lack of specification which, just as in Freire's case, reduces the tension created between the goal of allowing students' voices to be expressed and heard, and the goal of helping them acquire a certain specific form of knowledge (e.g., of the interest structures in society).

2.3.2 Contemporary Critical Pedagogy: What Remains and What Has Changed

It has been noted that two stages in the development of critical pedagogy are recognisable. Some elements of the first stage have already been described in the previous section. What will mark the separation from that line of thinking in the second

stage will be the engagement with new ideas and criticisms coming mainly from feminist and postmodernist theorisations. The development is significant, and it is worth examining in detail what these changes represent for the ideas of criticality and knowledge imposition. I will start, however, with a recount of those aspects which did not change at all, or at least not significantly.

What Remains

Some of the aspects that remain can be said to be guided by the desire to change the present conditions of society. Because of that, it still is thought essential that forms of knowledge be examined, as part of the pedagogical practices in the classroom, in relation to the wider societal dynamics as moved by the constant re-accommodation of the interests of the various social groups (see for instance hooks, 1993; Aronowitz, 1993; Giroux, 1996 and 2000; and McLaren, 1996). In this way, the contents of the questioning are at least partly specified in political terms by critical pedagogues. This is further expressed in the adoption by critical pedagogy theorists of the interest in popular culture that is a central characteristic of British *Cultural Studies* (see for instance Giroux and McLaren, 1994; and Giroux, 2000).

In this, critical pedagogy has not limited itself to making repressed or silenced knowledges publicly available, to allow them to reappear and become a possibility. They have further attempted to critically inquire both into the conditions that led to the silencing of those knowledges, and into the social and political relations assumed by them and their implications. McLaren, for instance, has argued that "a pedagogy that takes resistance postmodernism seriously does not make the nativist assumption that knowledge preontologically available and that various disciplinary schools of thought may be employed in order to tease out different readings of the same 'commonsense' reality in a context of impartiality" (1994, p.216). Instead of that nativism, he advocates a critical interrogation of the presuppositions it entails, as well as the relations with the social and political reality (see also McLaren and da Silva, 1993). Similarly, Giroux has argued that the main purpose of critical pedagogy is not to articulate and narrate silenced authentic voices, as if authenticity were a justification for accepting or adopting a particular voice:

While identity politics was central to challenging the cultural homogeneity of the 1950s and providing spaces for marginal groups to assert the legacy and importance of their diverse voices and experiences, it often failed to move beyond a notion of difference structured in polarizing binarisms and an uncritical appeal to a discourse of authenticity. (Giroux, 1994b, p.31)

To focus on voice is not meant simply to affirm the stories that students tell, it is not meant simply to glorify the possibility of narration. Such a position often degenerates into a form of narcissism, a cathartic experience that is reduced to naming anger without the benefit of theorizing in order to understand both its underlying causes and what it means to work collectively to transform the structures of domination responsible for oppressive social relations. (Giroux, 1990, p.225, see also 1987)

Given that some authors regard Freire's work as promoting the uncritical acceptance of the views of the oppressed, on the grounds of autonomy and authenticity (see for instance Gur-Ze'ev, 1998), this would actually mean a departure from his theorisation.

Something else that has not changed is the advocacy of dialogical relations that allow students to assert their views, but without falling into the trap of uncritically accepting them without having examined them critically (see Giroux, 1987). It is also claimed that those dialogical relations should create "safe spaces" in the classroom that make impossible the silencing of voices (1993a, p.174). In fact, Giroux has insisted with his warning that one may be "theoretically correct and (...) pedagogically wrong" (1990, p.222). I will not go deeper into this, because the core of the arguments justifying this position have already been explained.

Another quite important element of critical pedagogy that has remained, is related to the idea that hope for a better future, and the ideal of getting free from the various forms of presently existing oppression, are necessary if education is to make true its attributed role of helping achieve a more democratic society. I take it that this idea corresponds to the language of possibility that Giroux argued was an indispensable component of critical pedagogy (see section 2.3.1). Nevertheless, keeping this ideal produces a

tension with the discourse of postmodernism, insofar as this call for a so-called democratic society might be the manifestation of a totalising and repressive metanarrative that could silence other people's voices, and restrict, rather than expand, their possibilities. Various responses to this potentially imposing threat have appeared: Gur-Ze'ev (1998) has argued that critical pedagogy should abandon all positive orientations and adopt an exclusively negative and resistant form of critique. McLaren, instead, has continued to claim that "without a shared vision (however contingent or provisional) of democratic community, we risk endorsing struggles in which the politics of difference collapses into new forms of separatism" (1994, p.207). Giroux has taken a similar line of argument to McLaren's, remarking that otherwise the language of critical pedagogy would run "the risk of undercutting its own political possibilities by ignoring how a language of difference can be articulated with critical modernist concerns for developing a discourse of public life" (Giroux, 1989, p.150). Furthermore, Giroux follows Alcoff when she claims that "you cannot mobilize a movement that is only and always against: you must have a positive alternative, a vision of a better future that can motivate people to sacrifice their time and energy toward its realization" (Alcoff, 1988, pp.418-419). It is my opinion that this insistence on keeping a positive view of the future, rather than restricting themselves to critique as an eternal negative resistance, is the expression of the fact that for them education has an [instrumental] role to play in a larger project of liberation and emancipation. Now, this positive view and its role in the formation of the minimum forms of consensus (or "shared vision" in McLaren's words) needed for action—if action is to produce any effect at all—is of course related to forms of knowledge which are theoretical in at least one way: They transcend the personal and the extremely local, to go to the societal level; and in so doing they need to theorise about society. For instance, hooks suggests—and this relates both to this point and to the one mentioned above concerning the fact that criticality goes beyond mere articulation—that

that powerful slogan, "the personal is political," addresses the connection between the self and political reality. Yet it was often misinterpreted as meaning that to name one's personal pain in relation to structures of domination was not just a beginning stage in the process of coming to political consciousness, to awareness, but all that was necessary. In most cases, naming one's personal pain was not sufficiently linked to overall

education for critical consciousness of collective political resistance. Focusing on the personal in a framework that did not compel acknowledgement of the complexity of structures of domination could easily lead to misnaming, to the creation of yet another sophisticated level of non or distorted awareness. (hooks, 1989, p.32)

Actually, a positive view of the future that can mobilise collective action and resistance, requires an integrating critical account, that will necessarily modify those forms of knowledge expressed in personal voices, in order to accommodate them into a more general account. However, it needs to be said that the opposite relation does not hold: The problematisation of *native* voices does not necessarily lead to their integration into one single general narration or account.

What Has Changed

Again, it can be said that the changes can be mainly described in terms of the rejection of some Modernist assumptions, and the corresponding adoption of some Postmodernist ones. However, this should be better specified.

A first point I want to comment on consists in the recognition that class oppression is not the only or central axis of inquiry into oppression, and that a number of other social variables relevant to the issue of emancipation must be considered (see for instance Grossberg, 1994; and McLaren, 1996). It is my contention that even though for quite some time now Giroux and other authors in critical pedagogy have been using the word *oppression* in a broader and more inclusive way than simply to refer to class oppression, the particular analyses made and the fact that the expressions *oppressor* and *oppressed* were used to characterise people—rather than, for instance, describing particular relations between people—suggest that it was only one form of analysis of oppression that was being privileged over others¹³. As Grossberg puts it, "the emphasis on identities and differences, rather than on a singular identity, points then to the

¹³ Actually, a similar point can be raised concerning critical feminist pedagogies, which used to take gender oppression as the central category to which others were subordinated (see hooks, 1989; and Mohanty, 1994).

connection between the fragments, to the articulation between the differences" (1994, p.13), and to the new challenge, which is "to be able to theorize more than one difference at once" (Mercer, 1992, p.34).

As these two last quotes suggest, matters of oppression become now very closely related to cultural issues of identity and difference as complex issues not discernible by means of binary oppositions. Those issues will also be developed in these more recent encounters with postmodernism and feminism. These encounters have made textual analysis available as a tool for inquiring into the multiple possible relations between signifier and signified, as well as into the mechanisms by means of which particular relations between the two have become fixed and solidified in concrete instances of discourse. These fixations would effectively constitute relations of exclusion and inclusion, with profound consequences in the definition of identities and in the way difference is approached. Critical pedagogues, it seems to me, have been happy from the beginning to accept this new possibility opened by textual analysis and postmodernist and poststructuralist linguistics (see for instance Giroux, 1989 and 1990; But this appropriation has not taken place as a complete and Mohanty, 1994). overwriting of the previous theorisation. This way—and this is a crucial point for distinguishing critical pedagogy from other forms of pedagogy adopting ideas from poststructuralism and postmodernism—it is still highly critical and highly political, refusing to stay at the local level and always trying to go to the general, and refusing to focus only on the textual, to also look at the material. McLaren has for example distinguished *ludic postmodernism* from *resistance postmodernism*:

Ludic postmodernism generally focuses on the fabulous combinatory potential of signs in the production of meaning and occupies itself with a reality that is constituted by the continual playfulness of the signifier and the heterogeneity of differences. (1994, p. 198)

Resistance postmodernism brings to ludic critique a form of materialist intervention since it is not solely based on a textual theory of difference but rather on one that is social and historical. (p.199)

It is of course resistance postmodernism which critical pedagogues such as McLaren

want to adopt. Ebert has further claimed that "the differing, deferring slippage of signifiers [should not be] taken as the result of the immanent logic of language but as the effect of the social conflicts traversing signification" (1991, p.118). Giroux has also suggested that the form of critique which is more appropriate is one which brings the somewhat modernist concern of feminism for politics and issues of power and oppression, into the textuality of postmodernist discourses (1990). In this sense, the core intention of a critical postmodernist pedagogy is not simply to make public, or available, voices which had been repressed or silenced so far, or "to help students redescribe or represent themselves in new ways" (McLaren, 1994, p.217); it further seeks to inquire into the politics of those processes of silencing, the material societal conditions that allow for them to take place, and their social consequences¹⁴. This can be further seen in Giroux's and McLaren's polemics with discourses of authenticity and of nativism, as explained above.

Another aspect which has been developed in recent critical pedagogy concerns the role of the teacher and of authority in the classroom. The teacher, it is recognised, is not just another participant in the classroom conversations, and instead s/he must exercise some authority. Now, authority would normally be seen, in relation to knowledge imposition, as setting restrictions on the possible forms of knowledge that can be adopted by those upon whom that authority is exercised. In this sense it would be restricting, and indeed forms of more symmetrical dialogue have long been advocated in critical pedagogy to avoid those restricting implications. Giroux, however, has conceived of a different form of authority, which he calls *emancipatory authority* (1986) which would be committed to "expanding rather than restricting the opportunities for students and others to be social, political, and economic agents" (1993a, p.169). And it is this authority, precisely, what is needed to go beyond personal experience to be able to question it from a social and political perspective. As a result of that questioning, new possibilities must emerge.

A last point worth exploring refers to the explicit abandonment of any claims to truth

¹⁴ Interestingly, Giroux has recently sought to defend that cultural dimension of critique, from criticisms by others who want more emphasis on the material (see Giroux, 1999 and 2000; and for the criticisms see Rorty, 1999, and Gitlin, 1995). At the same time, critical pedagogues have also criticised theorists who focus only on the textual and cultural (apart from the texts by McLaren and Giroux already mentioned, see Salman, 1998).

for particular readings of reality, that was present in early critical pedagogy. postmodernist "endless play of signification" would be a notion running against any possibility of truth as a fixation of meaning that stabilises and objectifies relations between signifier and signified. Thus, the adoption of a postmodernist discourse rules out any possibility of fixing truth, and relegates it as a secondary concern for critical thinking in education, and even for education itself. Let me distinguish, however, between two levels at which truth and its abandonment can make sense: firstly, at the level of the readings of reality that are questioned by critical pedagogy practices; and secondly, at the level of that very critical questioning and its result or actual critical assessment of particular readings of reality. It is my contention that it is only clear for most of the work in critical pedagogy that the notion of truth has been abandoned in the first of these two levels, and that the postmodernist critique advocated has not been interrogated in turn regarding its own arbitrariness and fixation of meaning. One possible reason for this may be the fact that it would be more difficult to justify the need for any critique and critical thinking at all in education, which is what critical pedagogues have so forcefully defended. That is, one may have to learn to live with the uncertainty and arbitrariness of one's own readings of reality, but holding readings of reality in one way or another is inevitable, and it would be possible to know what those ways are and to question them. Interestingly, McLaren seems to argue that critique of readings of reality is not neutral just like readings of reality are not (1994).

2.3.3 Knowledge Imposition in Critical Pedagogy

Attempts to Prevent Knowledge Imposition

In general, in critical pedagogy the strategy to prevent knowledge imposition is very similar to that found in Freire's work. In the same way, I will argue that two different but related strategies are used to prevent different kinds of knowledge imposition. One of them refers to the pedagogical interactions between teachers and students. As I have shown, the explicit commitment to forms of dialogue in which the teacher's voice does

not become dominant is central for critical pedagogy. The idea here is to prevent the teacher from indoctrinating students with her/his ideology. It has to be said, though, that no well-developed theory in this respect has been advanced, and it remains obscure what kinds of interactions would produce or prevent knowledge imposition. I will not examine further, however, dialogue as it appears in critical pedagogy, because I have already discussed it in the previous subchapter in relation to Freire's approach.

Critical pedagogy does seem to be strong in critique and in revealing messages which were subtle and not visible at first sight. In Freire's case, those revealed messages had mainly to do with social and economic implications as seen from a Neo-Marxist perspective. My conclusion then was that those messages could not have been revealed if there had not been a teacher of that ideological orientation. The acceptance by the students of at least part of that ideology would then be necessary in order for them to be able reveal and question those forms of knowledge. This resulted then in the conclusion that critical consciousness was at least partly defined in terms of which beliefs were held by the student. Now, especially in recent versions of critical pedagogy the notion of critical consciousness does not appear much¹⁵. The encounter with feminism and postmodernism has arguably helped loosen the expectations about what students could come to believe and do at the end of the educational process. There are various reasons for this. One of them is the acknowledgement of the multiplicity of aspects that constitutes the social location of each student, and of the sometimes contradictory interests that characterise the relations between various aspects. This way, for instance, white North-Atlantic middle-class women working on a voluntary basis in social programmes in third world countries, will relate with women in those countries in ways characterised by a multiplicity of aspects, some of which may put them in opposition to each other, or bring them together in solidarity (see Mohanty, 1994). Another reason is the abandonment of the idea that it could be possible to aspire to achieve truth. If there is no and cannot be absolute truth concerning the social world, then there is apparently no reason to limit too much the possibilities about what is expected of students.

As I understand it, the mode of critical questioning in this case is one that firstly articulates forms of knowledge that have been repressed or silenced by the dominant

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¹⁵ One exception is hooks (1989).

groups. In order to do this, a sociological, political, and historical analysis is regarded as necessary, so that it is understood what and whose voices were silenced. It is perhaps in this process that a larger range of possibilities is disclosed, and where the imposition of dominant forms of knowledge is prevented. All these voices, dominant and silenced, will then have to be critically questioned by students in terms of their social and political implications. This second process of questioning, which is of course related to that of expanding possibilities, is perhaps what critical pedagogy theorists mean when they argue about going beyond the discourses of nativism and authenticity, and the mere articulation of alternative forms of knowledge.

Criticisms Related to Knowledge Imposition

In spite of the insistence on the importance of being pedagogically—and not only theoretically—correct (Giroux, 1990), and as Gore has also argued, critical pedagogy theorists have not really tried to develop refined ways of observing and designing classroom interactions between teachers and students, and remain weak in this sense (see Gore, 1992 and 1997a). Indeed, Gore's own empirical studies of pedagogical interactions in various contexts suggest that normalisation occurs in interactions guided by a radical intent—including a critical pedagogy classroom—to at least the same extent as in what she has called mainstream classrooms (see subchapter 2.6 in this document). Now, normalisation represents one way in which power may be exercised in interactions, and may lead to he shaping of the consciousness of the person being normalised. This means that there is the possibility that, despite their rhetoric and their efforts, at least some critical pedagogues are not or have not been able to live up to their principles. Other authors have similarly cast doubt on whether critical pedagogues actually create a genuine non-repressive dialogue in their classrooms (see for instance Ellsworth, 1989; and Turnbull, 1998). Now, this difficulty may be interpreted as simply meaning that it is not easy to do it, but leaving the possibility open that it is still achievable in principle. But it can also be interpreted as hinting at the possibility that there are internal contradictions in critical pedagogy theory, such that the achievement of one goal conflicts with the achievement of another.

In fact, Ellsworth, in a very influential paper (1989), attributes this repressive element

occurring in the classrooms, to the ideal of critical pedagogy of a dialogue in which consensus can be achieved by means of a rational resolution of differences. The consensus sought would be guided by an ideology that becomes masked in an abstract and obscure language that provides "decontextualised criteria for choosing one position over others" (ibid., p.301). This ideology would presumably provide the positive utopian vision of the future mentioned in section 2.3.2, that critical pedagogy theorists argue is necessary even if it is only provisional. Gur-Ze'ev (1998) has argued in this respect that

with all their differences, today's versions of critical pedagogy are all based on weak, controlled, and marginalized collectives for their common optimistic view of the possibilities of changing reality and securing unauthoritative emancipation, love, and happiness. (1998, p.463)

The idea is that the promotion of a positive view of the future that could bring about collective action, or at least a collective imagination, renders critical pedagogy vulnerable to the criticism that it would need to somehow shape and repress voices that are not in line with that view.

For this reason, Gur-Ze'ev and others have advocated a mode of critical pedagogy that is only negative. It would be devoted to "identifying, criticizing, and resisting violent practices of normalization, control, and reproduction practices in a system that uses human beings as its agents and victims" (ibid.) About this proposal one could then ask whether it is possible to have a critical questioning that does not suppose the acceptance of an ideology externally imposed. That the questioning is necessary is clear not only from Gur-Ze'ev's words, but also from the polemics of Giroux, McLaren, and others, against uncritical nativism and the discourse of authenticity (discussed in section 2.3.2). Now, one might ask what counts as a proper critical questioning, and what as evidence that a student should be declared *critical*? That is not so clear, and as far as I know there are no detailed reports of how success or failure of critical pedagogy educational processes is assessed in those terms. It is significant, however, that many essays written by critical pedagogy theorists include analyses of the social, economic, and political situation of the countries they are in (for instance, see McLaren, 1998; Apple, 1999; and Giroux, 2000). Are these analyses an indication of what is expected of students, or at

least of the direction the questioning is supposed to take? For they are oriented towards the political Left, and are therefore certainly not shared by everybody in society. Interestingly, Harvey Siegel—a philosopher whose name is associated with informal logic and the Critical Thinking Movement (see subchapter 2.1)—has argued that radical pedagogy requires an objectivist epistemology if it is to be able to "establish, for example, that apparent victims of marginalisation or oppression are actual victims" (1993, p.43)¹⁶. The point seems to be that the shift promoted by critical pedagogy from the issue of the validity or truth of some view that is going to be questioned, to the issue of the social and political conditions that give rise to someone holding that view and the implications of adopting it, does not really change the need for justification. For my purposes here, the point seems to be that critical pedagogy teachers would still use as their starting point some particular views about society—about the kinds of oppression there are, about who is oppressed and in what ways, etc.—that might have to be imposed if the critical questioning they envisage is to occur.

2.4 POST-RADICAL PEDAGOGIES

In the previous subchapter I mentioned the fact that from the late 1980s, critical pedagogy became influenced by feminist and postmodernist forms of theorisation. Some of the aspects that were modified have also been mentioned, and they include the abandonment of claims to validity or truth—the acceptance of the impossibility of a comprehensive validity—the acknowledgement of a higher complexity regarding people's—and students'—social locatedness than can be explained by the category oppressed, the adoption of forms of textual and cultural analysis, and the acceptance of the fact that authority and power are not only inevitable, but also necessary and perhaps also productive in various senses (as in the notion of *emancipatory authority*).

A number of authors coming from different disciplines and orientations, however, have criticised some aspects of critical pedagogy, among which some are very directly

¹⁶ Siegel's actual purpose with his paper was to encourage critical pedagogy theorists to abandon the

related with knowledge imposition (see section 2.3.3). Contrary to the situation in critical pedagogy theory, the work of these authors has arguably not constituted a unified theoretical strand of thinking, or a movement, and can only be loosely grouped under the title of post-radical pedagogies¹⁷. As post-radical pedagogies can also be said to be influenced by those feminist and postmodernist discourses, quite a few similarities will appear with critical pedagogy. However, and as the expression suggests, they also attempt to differentiate themselves from critical—or radical—pedagogy in important In what follows, I will try to give a brief description of some of the ways. characteristics of these pedagogies, putting the emphasis on those issues that distinguish them from critical pedagogy.

It is important to clarify that some feminisms can be seen as belonging to the general view of critical pedagogy that I presented in subchapter 2.3 (see for instance hooks, 1989; Brady, 1994; and Duhan Kaplan, 1991). It is for this reason that I am not devoting a new subchapter to their work, and have preferred to include it with critical pedagogy. Curiously enough, it is feminists who have become the main critics of radical pedagogy:

The work of critical pedagogues has increasingly been challenged, not so much by the conservative Right as by feminists and others from the Left who might be expected to share its broad political aims. (Buckingham, 1998, p.6)

2.4.1 Power, Identity, and Emancipation

In a seminal and much discussed and commented paper, Ellsworth (1989) launched a strong criticism aimed at critical pedagogy. She argued that in the name of dialogue, a dialogue that was supposed to empower students and eliminate the presence of force and authority in the classroom, the repression of voices was actually promoted.

relativist epistemology that he imputes them.

¹⁷ The use of the plural in *pedagogies* attempts to portray this.

Furthermore, critical pedagogy was attacked for failing to actively acknowledge and respect differences, due to its favouring of a uniformisation that takes place through dialogue, and in which students are supposed to achieve a rational consensus.

Drawing on a poststructuralist theorisation, in many cases based on Foucault, various authors argued that the idea of eliminating the operation of power in the classroom was simply not possible (see for instance Walkerdine, 1992; Ellsworth, 1989 and 1997; Gore, 1992; and Usher and Edwards, 1994). Power, in this view, is even productive, and no knowledge can be explained without it. Moreover, it is seen as operating in modern societies in an almost invisible but ubiquitous way, that is far more refined and subtle than overt coercion. As seen in the previous subchapter, Giroux had already acknowledged the impossibility of eliminating authority in the classroom altogether, and postulated what he called emancipatory authority (Giroux, 1986), as students were regarded as in need of emancipation from the dominant discourses that expressed the interests of the powerful. Importantly, that general idea of education as an instrument for emancipation is somewhat relegated in post-radical pedagogies, perhaps precisely due to that acknowledgement of the productiveness of power. Buckingham, for instance, has associated critical pedagogy with an attitude of defensiveness (1998). In examining media education in particular, he suggests that this attitude is closely related to a view of media

which emphasizes their role in sustaining relations of oppression and domination. The media are seen as purveyors of the "dominant ideology", while children in particular are regarded as passive victims of their influence. From this perspective, teaching about media is seen as a means of arming students against the false values they are seen to contain; and the central strategy here is that of critical analysis. (1998, p.8)

But there would be another possible line of work in which popular culture and the media are seen as part of the students' *authentic* experience, and because of that as "means of 'resistance' and potentially of 'liberation'" (ibid.) This emphasis on letting students explore their own cultural investments, experiences, and concerns would potentially create a plurality of perspectives, which is a path away from the normalisation that is related to positive *collective* views of society and of its future. It

would be in the differences and contradictions between these two approaches that post-radical pedagogies could be seen to be located. In fact, a number of paradoxes have been explored that necessarily constitute pedagogical activities (see for instance also Luke, 1996 and 1998; Orner et al., 1996; and Ellsworth, 1997). One of them would be the one that "emerges in postmodern practices of pedagogy in the relationship between teacher and students: the teacher takes control and manipulates the students into the position of taking responsibility for the meanings and knowledge they construct" (Orner et al., 1997, p.77). A general attitude of living in and with those paradoxes can then be said to be part of this post-radical attitude.

One concern of crucial importance for post-radical pedagogies is the formation of students' identities. There is the question of how various messages from the media, popular culture, the official institutions of society, tradition, and so on, present identities to people that portray them in certain ways. In defensive views, like that attributed to critical pedagogy, students would be regarded as adopting these identities in a passive way. In the case of post-radical pedagogies, however, those possible identities are made explicit, as new possibilities are allowed and encouraged. A more fluid pedagogy that does not fixate students' identities would therefore be preferred (see for instance Ellsworth, 1997). The study of identities has been informed by the disciplines of media studies, literary criticism, semiotics, particularly insofar as they all examine the ways in which meanings are constructed out of texts, the role of the reader/viewer in that construction, and the position adopted by the latter as a response to it.

2.4.2 The Impossibility of Fully Understanding, and Indeterminacy

Interestingly, while Giroux had concentrated on the construction of a critical pedagogy that did not assume a deterministic view of the way dominant ideologies influence the consciousness of the oppressed—or what is known as the *correspondence theory*— (see Giroux, 1980a), post-critical pedagogy theorists point out that there is still in that theorisation the assumption that, *without external help*, students will actually end up

adopting those ideologies and the identities that they are offered. The problem with this view is that it simply assumes the rationalistic position that sustains that consequences or effects can be predicted. In this sense, critical pedagogy has been said to be about prediction and control. This control would be one on students for them to develop ideas that are oriented in a particular ideological and political direction. In this respect, Buckingham has argued that the problem is twofold: On the one hand, there is the paradox already mentioned in relation to Paulo Freire's work (see section 2.2.5) concerning the fact that if students were allowed to think for themselves, then they might not choose to take the form of emancipation being offered to them by critical pedagogues. And on the other hand, the indeterminacy of the social, according to him, makes it actually impossible to predict what the students' reaction to the teaching process will be, and thus also guarantee their conscientisation (see Buckingham, 1998). In this respect, Cohen (1988), Ellsworth (1989), Moss (1989), and Rattansi (1992), among others, have reported on examples of failures in critical pedagogy practice.

The point, and it has been repeatedly stated, is that it cannot be assumed that known courses of action will lead to known outcomes (see for instance Usher and Edwards, 1994). Ellsworth, for instance, drawing on the film theory notion of *mode of address* for discussing pedagogical issues, has argued that there is always a gap between the person the addresser thinks the addressee is, and the person the addressee thinks s/he is her/himself: "The viewer is *never* only or fully who the film thinks s/he is. (The viewer is never exactly who *s/he* thinks s/he is either (...).)" (1997, p. 26). And O'Shea has remarked along the same line that dominant educational discourses "whether on the side of socialization or of liberation, have been over-rationalistic", which means that

they ignore the fact that however carefully goals are set out, curricula designed and implemented, there is no guarantee that the knowledges and social subjectivities offered the pupils are appropriated as intended. (O'Shea, 1993, p.504)

The impossibility of prediction, which would be related to the indeterminacy of the world of the social, is further related to the impossibility of fully understanding the other. As in educational arenas meanings are created and recreated in an endless process of interpretation, and signifiers themselves become objects of interpretation,

fixation of meaning is deferred and actually never achieved (see Haywood and Mac an Ghaill, 1997). Total understanding of the other, across differences in positioning and identities, becomes an impossible ideal. In this context the accusation that certain pedagogies erase differences by means of a consensus-seeking dialogue becomes meaningful: If a consensus is ever reached it is because the endless play of signification has been stopped by an act of violence. Here, then, no positive collective vision of the future is then attempted to be achieved, for that would be an inherently violent act.

2.4.3 Pedagogy

It is not very clear to me what the pedagogical recommendations are by these authors. In fact, they have sometimes refused to give any positive prescriptions—as if by following those prescriptions one could avoid the paradoxes inherent to pedagogy. As said before, theories coming from media studies have strongly influenced the development of post-critical pedagogies, partly because it is in relation with the education in these fields that these pedagogies have developed. One significant example of the use of such concepts is Elizabeth Ellsworth's development of the notion of *mode of address*, imported from film theory, to tackle issues about pedagogy (1997). Mode of address in film theory can be understood in terms of the kind of persons that a film thinks, wants, or hopes, its viewers to be:

Filmmakers make many conscious or unconscious assumptions and wishes about the who that their film is addressed to and the social positions and identities that their audience is occupying. And those assumptions and desires leave intended and unintended traces in the film itself. (1997, p.24)

Now, if mode of address is relevant to film theory, then it must be relevant to other activities in which someone, who to some extent plays the role of audience, is addressed in some way. Education is, of course, one such activity:

All this raises the possibility of discussing educational texts (such as

textbooks, web sites, educational videos, museum installations, multicultural curricula) and pedagogical practices (such as interactivity, dialogue, media used in the classroom) in terms of mode of address. (ibid., p.45)

Along with *mode of address* there are others being used in post-radical pedagogies. But it does not seem to be these notions in particular that distinguish them from critical pedagogy and other pedagogical proposals. It is their incorporation into a broader and more general attitude that rejects rationalistic, universalising, and patriarchal forms of dialogue and of contents. In any case, Ellsworth's distinction between *educational texts* (of various kinds) and *pedagogical practices* in the quote above, suggests that there are two domains in which these notions and ideas could be used. On the one hand students could use them to inquire and acquire a better understanding of the various kinds of materials and messages they are offered from various sources. Importantly, this would allow them to choose from a larger range of possibilities for constructing their own identities. On the other hand, teachers could use those ideas to design pedagogical activities in such a way that a better fluidity and a larger expansion of possibilities for students to construct their identities and knowledge could be achieved. The latter case is instanced in what has come to be called *performative pedagogy*, which is totally situated, and does not try to construct positive educational discourses that in their positiveness determine certain classroom events as excesses and therefore construct mechanisms to contain them (see Orner et al., 1997). It, so to speak, takes classroom moments and events as they come, and constructs the classroom interactions upon them without the guiding light of an educational discourse that could provide the right path. Furthermore, "performance, like the production of partial texts capable of resignifying what counts as valued and valuable body in the world, makes claims not about truth and validity, but about what is viable and what is impossible in relation to a particular audience in a particular situation. As such, these practices construct knowledges and ways of knowing that exceed dialogue" (ibid., pp.88-89).

2.4.4 Knowledge Imposition in Post-Radical Pedagogies

Attempts to Prevent Knowledge Imposition

If emancipation may look to post-radical pedagogy theorists as a suspicious ideal that will inevitably erase difference by means of the use of violence, there is, nevertheless, a certain and perhaps milder form of emancipation that is actually sought by them. It is this violence that would impose certain visions of the future, certain offered identities, and so on, which students are thought of as being ideally without. The imposition, however, would not be deterministic, but there would nevertheless be an influence that cannot be denied (see Buckingham, 1998). This form of emancipation would be opposed to a notion that these authors frequently use—especially to criticise the critical pedagogy theorisation—which is that of *repression*. This is what makes meaningful Ellsworth's criticism of critical pedagogy as repressive, and her attempt to provide an alternative pedagogy.

Arguably, the *imposition* in this case, if it can properly be called that way according to this theorisation, would be more related to the impossibility for students of, in particular educational moments, exploring alternative possibilities to the ones that have been offered them. It perhaps might not be a real instance of knowledge imposition given that they will not necessarily adopt what is being offered. However, it is appropriate to talk about imposition in at least the following sense: The impossibility of being able to envisage alternative possibilities means that there is a restriction as to what the students will regard as possible. In the long run, it is from within the alternative possibilities that are available to a student that s/he will be able to choose, be it in terms of knowledge, or in terms of identities that could be adopted by her/him.

But, as explained at the end of the previous section, the theorisation of post-radical pedagogies can also be used to design pedagogy, even if the design only occurs at the very moment of the pedagogical interaction, in such a way that it is not repressive. This is arguably the case of performative pedagogy.

Criticisms Related to Knowledge Imposition

Post-radical pedagogies have been accused by various authors in critical pedagogy of not being political enough, and of therefore helping perpetuate societal forms of oppression (see for instance Salman, 1998; and Kohli, 1991). As Buckingham himself says about this kind of work, it "will be seen as a further indication of a widespread loss of faith in the certainties of radical theories and educational strategies; in this sense, it might be accused of displaying a political agnosticism which is symptomatic of its time" (1998, p.14). Now, this criticism mainly relates to the role that education plays in society, and as such seems to be related to the general social consequences of adopting one or another pedagogical practice. But in terms of knowledge imposition, the choice made by post-radical pedagogy theorists suggests that at least forms of knowledge associated to the positive vision of the future and the shared view of society that to a certain extent is promoted by critical pedagogy, will not be imposed.

However, as argued in subchapters 2.2 and 2.3, the promotion of those views of society and the future by critical pedagogy is partly the result of as well as a requisite for the critical examination of [dominant] ideas. The disclosure of possibilities appears, precisely, in that promotion. If those dominant ideas are not clearly pointed out, then they may never be questioned; but they are pointed out only when those broader social issues are explicitly reflected on. The failure to make those issues explicit in post-radical pedagogies may be reflected in a failure to question them, and therefore in a failure to prevent their imposition.

An additional comment related to knowledge imposition applies in a similar way as it does to critical pedagogy. Let us notice that the identities available that the students are supposed to be empowered to choose from, as portrayed by post-radical pedagogies, may correspond to ideologically laden interpretations that will carry the mark of the teacher. That is, these identities—and related forms of knowledge—may look in different ways depending on the particular person providing the interpretation. If it is the teacher who does this, then her/his particular ideology or readings of reality will be imposed, and this imposition will remain hidden.

2.5 YOUNG'S HABERMASIAN CRITICAL THEORY IN EDUCATION

In this section I will examine briefly a form of analysis which incorporates in a thorough way Habermas' critical theory in education. It was developed by Robert Young, and his discussion covers a large range of issues about schools and the formal education system in general. Here I will concentrate on his views regarding what happens in the classroom, as this seems to be what accords the most with the purpose of the present project.

This analysis is significantly different from the others examined so far in that it is concerned to a great extent only with the relationships that are established in the classroom between teacher and students, and pays no particular attention to *what* is discussed in the classroom. As he says in the opening paragraph of his book *Critical Theory and Classroom Talk*,

This book is about the way relationships between teachers and learners are expressed through language. It is about the form such relationships must take if they are to enhance the power of learners to solve problems. And it is about the kind of relationships which are best suited to promoting improvements in the problem-solving power of the global community. (1992, p.1)

The primary object of inquiry in Young's approach is, contrary to most of the authors examined previously, one of structure, understanding by *structure* the general patterns of communication in the classroom between teacher and students. And the primary question is about the kinds of structure that embody and/or promote the development of students as autonomous but responsible inquirers. In this respect, Young comments on the lack of power of purely cognitive and logical tools—just like those provided by the Critical Thinking Movement—for the fostering of intellectual autonomy:

A capacity for recognising logical contradictions, conceptual confusions,

statements unsupported by evidence and so on, however valuable, does not add up to a capacity for intellectual autonomy. Whatever the problems with 'capacity' as a concept, it is clear that the idea of capacity for autonomy is vacuous unless it is a capacity for its exercise in the form of participation in forming validity judgements in actual social situations of unequal power and authority. (Young, 1990, p.121)

Young recognises, as many other authors do, that most of the educational centres nowadays have embarked in the task of making students learn some particular formal knowledge which "is someone else's interpretation of the world, someone else's reality. Its primary characteristic is authority. It is 'correct'; it is what the book says; what the teacher says" (1992, p.23). This remark is also significant in that it establishes critical theory in the classroom as being about the students' autonomous assessment of the validity of "what the book says", or of "what the teacher says", or whatever is the case: "critique is nothing more or less than the process of discriminating between 'good' and 'bad' and of understanding how and why these arise" (1992, p.4). More generally, he also uses Habermas' distinction between *critical theory proper*, which is a theory of the general human capacity for inquiry, and *critique*, which is a fallible and historically situated critical analysis of particular situations. The project of developing a critical theory, then, would be one of reconstructing the forms of meaning interpretation and validity assessment implied in the communication practices in communities, or the "ontology of communities of inquiry" (1992, p.33).

In what follows I will examine the general theorisation that underlies his approach, as well as the concrete practical forms of critical research derived from it that help carry out critique in practical contexts.

2.5.1 Method and Discourse

A criticism is made here of those authors who advocate a position in which it is suggested that what is needed to acquire true or valid beliefs is that the individual

follow a proper method of inquiry. Young calls this the "Cartesian error: the belief that the truth is the correct application of method rather than a product of discourse, and the belief that method is something that can be replicated by isolated, individual minds" (1992, p.16). For Young, this is the result of declaring "participation in a community of inquiry" as a "species-wide endeavour". Following Habermas, Young will take truth to not be the result of the correct application of a method, but to be defined in terms of the discourse process itself. This idea can be seen as itself following the basic Peircian insight that "the opinion which is fated to be ultimately agreed to by all who investigate is what we mean by the truth, and the object represented in this opinion is the real" (Peirce, 1955, p.38), with the added element that it has to have occurred under ideal conditions of undistorted communication. This connection between discourse and truth is further exploited in the description of inquiry as a mutual engagement in dialogue between the members of a given community (a community of inquiry), in which a construction and a reconstruction of socially useful/usable meaning take place.

Given this formulation of inquiry, the disabling of someone's capacity to become part of the community of inquiry, on an equal basis to the other participants in it, becomes a fundamental problem. In the case of pedagogy, the main manifestation of this disablement is indoctrination. Young describes the more widely accepted notion of indoctrination that says that it "involves students' coming to believe a proposition or viewpoint otherwise than on the basis of their understanding of the grounds for warranting its belief and their uncoerced assent to these" (1990, p.89). His idea will be to design the relevant aspects of classroom activities so as to ensure that indoctrination does not occur. Alluding to work by critical pedagogy theorists, Young suggests that "pedagogical tact or restraint is necessary as far as the content of the teacher's own critical theorems is concerned. Critical pedagogy has far more to do with the method of teaching than with the advocacy of a particular set of criticisms concerning racism, sexism, peace or whatever—however valid these may be in another context" (1990, p.129).

One first related element of critique can be found in the Habermasian distinction between two different forms of communication, one being that in which the participants in conversation—or at least one of them—try to bring about something in the world, and the other one that in which they seek understanding. The former is called *strategic*

action, whereas the latter is called *communicative action*. The strategic form of communication can lead to a distorted communicative situation:

When the truth of what is said is not allied to a relationship between the person who makes the truth claim and the hearer, which leaves the claim open to rational question, and the expressed feelings of the speaker are insincere or, in their own way, demanding of commitments beyond those which the consideration of argument and evidence by the hearer warrant, a distorted communicative situation is created. (1992, p.49)

2.5.2 Validity, and Distortions of Communication

Now, hindrances in practice to the possibility of advancing, questioning, and of defending claims, regarding any or all of the three dimensions would imply some distortion of the communicative process. An undistorted process is postulated, although only as an ideal: "The circumstances under which people in dialogue can treat each other (and reflexively themselves) as reasoning, feeling beings, without hindrance or constraint, have been called the Ideal Speech Situation" (1992, p.50). This notion would be what makes possible a form of critique that is not simply a dogmatic assertion of one set of values and principles over another. The notion of an ideal speech situation (ISS) is, however, counterfactual; that is, it does not exist and perhaps can never exist as such, but nevertheless it must be assumed in order to allow for communication to continue or exist in the first place. Because of this, and especially because of the dependence of critique on the particularities of the context, it is suggested that the ISS should not be taken in a direct way as a standard against which one could measure the goodness of actual speech situations. Instead, Young suggests that "we can try to identify existing constraints, even ones that seem quite justified to us, and imagine the situation with these removed" (ibid.).

The construction of the idea of ISS makes use of the universal assumptions that presumably underlie and make speech communication possible. There would be four

such assumptions (1990, p.75):

- (i) that what we are saying or hearing is intelligible, i.e. is coded according to the usual rules, etc.;
- (ii) that what we are saying or hearing is true in so far as it implies the existence of states of affairs, etc.;
- (iii) that the persons speaking are being truthful or sincere;
- (iv) and that the things said are normatively appropriate considering the relationships among the people and between them and the situation they are in.

The validity of claims has therefore become three-folded here, involving the notions of *truth*, *rightness*, and *truthfulness*. Now, all utterances in context would present elements of all three aspects or forms of validity, and therefore the distinction is not an attempt to separate types of utterances. Some utterances may focus more on one of these forms, but all three would be explicitly or implicitly present. It is, rather, an analytical distinction.

The treatment of distortion of communication in terms of the participants' asymmetry in the opportunity and use of certain dialogical resources also allows Young to redefine the notion of indoctrination. In this vein, he suggests that "strategic structures of communication in teaching are inherently indoctrinatory because the hearer [the students] is unable to take a rational position on validity claims which are concealed" (1992, p.54). Another important aspect to highlight is the idea by Habermas that for dialogue to take place some assumptions are made—about the roles taken by speakers and hearers, etc. However, when normative disagreement about those roles, or cognitive dissonance, etc., emerge, these assumptions can be questioned by shifting to a meta-level in which they can be properly addressed, provisionally suspending the conditions of the previous level of dialogue. This possibility would be, importantly, a defining factor of ISS, and for Young "a necessary part of the expression of rational autonomy" (1992, p.58).

2.5.3 Genres of Discourse: Content and Structure

As it is an ideal formulated in a way which is independent of the actual conditions of any given situation, the ISS, as a theory of universal pragmatics, would only give general guidelines for critique. The task of making it practicable would be part of an empirical pragmatics which would study "actual utterances in specific, differentiated social contexts". In this point Young will however take a non-Habermasian path, implementing a different way of observing the presence or absence of the conditions of communication as pointed out by the ISS. According to him, speech acts—which are favoured by Habermas as units of analysis—would be too formal and literally-meaning, and would "lend themselves poorly to the real world of non-standard forms, oblique and elliptical meanings, irony, poetry, textual meanings, overlapping meanings, extraverbally supplemented meanings etc." (1992, p.63). Instead, he proposes to use Halliday's and Hasan's systemic linguistics as a more suitable approach for the proposed task. Young says that systemic linguistics "provides a general or universal level of analysis of language functions", and that "through the concepts of context of situation, context of culture, contextual configuration, genre and generic structure potential it provides a basis for the analysis of situated speech" (p.64).

In this approach, a central unit for analysis of linguistic interaction is *genre*. Young defines *genre* as a set of "structured expectations about speaking roles and how speech should proceed in given situations" (1992, p.66). These structured expectations would effectively control how speech is carried out; that is, they would act as a kind of force that would urge one to display a certain speech behaviour. Young refers to this as *control by structure*. The term *structure* in this expression plays a central role for this approach, in its opposition to content; and in this respect his description of the distinction is a useful one:

The difference between the permeation of daily life by a system of ideas (content) and by a set of practices which constrains subjects in speaking so that particular forms of self-representation *seem* to articulate their real situations, is an important difference. (Young, 1992, p.71)

In one case there is an emphasis on systems of ideas that have as their object—what they are about—how the relations between categories of actors are supposed to be; in the other case the emphasis is put on the practices through which certain types of relations are actualised. Young's position about these two options is very clear, as well as the reasons for his choice:

I would prefer (...) critique to be something that does not spring from externally applying a supposedly non-ideological system of ideas to criticise speech habits. I want to avoid the problem of justification that arises when I seek to claim that my system of ideas about men and women, children and teachers is non-ideological and so permits me to point out ideologies from 'on high'. If I can find a basis for critique that is both content-free (...) and internal to language, I will have avoided this burden. (1992, p.72)

The systemic functional analysis that Young uses is intended to allow one to go beyond the superficially apparent role of forms of speech, and therefore to see their function in the general conversation they are part of in a more appropriate way. Furthermore, he is interested in patterns of discourse as they recurrently occur in classroom conversations, and not in isolated cases; this helps him focus on more institutionalised forms of indoctrination or manipulation.

In research in the field in actual classrooms in schools, certain forms of interaction have been identified as very common in the relationship between teacher and students. For example, the reaction by a teacher to a student's answer—and even in many cases simply a claim—would typically present a structure that can be characterised by four functions: evaluation, ownership marker, [re]formulation, and confirmation invitation (Young, 1990, p.92). For instance, the sentence "Good, you're saying that the Nile has a delta, aren't you?" follows this structure: evaluation (good), ownership marker (you're saying), [re]formulation (the Nile has a delta), confirmation invitation (aren't you?). Perhaps having the student's answer—which is not present in Young's example—would be necessary to see that the formulation is really a recontextualisation, which represents a change of meaning from what the student originally said. That is, what the student said is taken to be "not quite right" and to require its completion or modification

in such a way that it is brought back to the path to discovery of truth. This takes the student into a subtle form of indoctrination that is not so apparent because presumably the student discovers something by her/his own means. Indeed, Young suggests that the [re]formulation is a form of colonisation because the teacher's meanings are somehow imposed on the students, effectively colonising their understanding of the world (1990, p.95; see also 1992, pp.113-114).

One particular concern for Young is knowing when apparent questions are not real ones: "The fact that a teacher's utterance has some sort of interrogative grammatical form does not mean that it is functionally 'a question' or that it is a particular 'kind' of question, for example open, closed, or rhetorical" (1992, p.91). Questioning can play various roles in various contexts: It can be used to try to motivate students, to revise, to test or assess, to control, to explore, to explain, etc. Two factors that can influence this role that questions can play are whether the questioner already has the answer in mind, and whether s/he expects the answerer to know it. For instance, if the questioner knows the answer but expects the answerer not to know it, this might be a case of what Young calls Socratisation: The teacher tries to lead the students to a predefined answer by a procedure of questioning that apparently—but only apparently—allows them to discover it by their own means. But this might still be a better option than the structure called Guess What the Teacher Thinks (GWTT), and which is more based in guessing than in reasoning. The general idea is that more detailed forms of this type of analysis would allow one to make finer discriminations between these different structures. Other recognisable structures according to Young are Reproduction Questioning (What Do Pupils Know), Finding Out, and Discursive. The latter would be the closest to Habermas' ISS.

The following extracts summarise some of the aspects which are worth highlighting in discursive forms of interaction between teacher and students, according to Young's analysis (1992, p.117):

- The teacher responds to something seen as problematic to him or her with questions or with counter-claims, that is, in the speech role of fellow inquirer.
- The pupils (...) have to make good their own claims with reason and

- evidence. Their claims are responded to as arguments to be taken seriously, but they are not simply allowed to 'do their own thing'.
- The students themselves, with the teacher, as a group, become responsible for standards.
- The ownership of the view and the responsibility for fixing any problems in it, or successfully meeting and overcoming the teacher's challenge to it, remains with the pupil.
- The pupils (...) do contradict the teacher, qualify points he has made, and add to them.

What seems particularly important is that Young has provided a way in which these properties or characteristics of an ideal type of communicative structure—in this case *discourse*—can be traced to smaller units of speech. In this respect, it can be said that this approach has gone a long way from other approaches in being precise in the specification of indoctrinatory and non-indoctrinatory forms of pedagogy.

2.5.4 Knowledge Imposition in Young's Critical Theory in Education

Attempts to Prevent Knowledge Imposition

Young's whole project is to a large extent defined in terms of the idea of being able to observe and explain instances of indoctrinatory and discursive forms of pedagogy, so most of what should be included in this section has already been said.

One central foe to be fought, as shown above, was indoctrination. But contrary to many of the approaches examined in the previous subchapters in this chapter, the analysis here has heavily focused on what happens inside the classroom, on the form taken by the conversations held between teacher and students. This represents a significant difference in that the idea of how to properly assess how valid someone's claims are—

which has been central to many authors examined here—is left on its own as long as each participant in conversation can and does question and assess that validity. In other words, criticality is not taken in this approach to be enacted in students acquiring the cognitive and logical capacities to question knowledge claims, but in the actual and visible material conditions of communication structure that do or do not allow students to question and assess those knowledge claims, at a particular time and a particular place.

Criticisms Related to Knowledge Imposition

Holt and Margonis (1992) have suggested that Young's approach wrongly believes that students will be indoctrinated only through strategic classroom interactions, thus failing to realise that this can only be determined if those interactions are seen in the context of "the larger social, economic, and political context that gives them meaning" (p.244). For instance, they continue, curriculum is not taken into account, and patterns at this broader level and their political consequences are never determined. Maddock has echoed Holt and Margonis, arguing that "Young characteristically uses the ideal speech situation to deduce appropriate classroom behaviour but he is not sufficiently sensitive to the social context or the perspectives of the participants. (....) While Young acknowledges that the crisis in education reflects that in society at large, he expects the schools to solve it by developing the procedures of better argument, without considering the content that is transferred" (Maddock, 1999, p.56). The message in both cases seems to be that by not promoting awareness about particular instances of content and their relation with wider social and political issues, students may not actually get to emancipate themselves from the forces they represent. As he goes on to say, "the problem with this contribution is its abstract and prescriptive character" (p.59), which makes it unable to differentiate the persons participating in the classroom interactions, beyond their roles of teacher and students.

I take this to further imply that, given that Young will pay attention almost exclusively to what is visible in the communicative interactions between teachers and students, just as they take place where and when they do, external forms of injustice and/or *inequality* that may have been previously internalised and imposed or that might affect the

interaction in more subtle ways are not really taken into account. This way, factors external to what can actually be seen in classroom interactions may remain invisible to the analysis and out of reach for the students themselves. This is, perhaps, a direct consequence of Young's preoccupation with the possibility of imposing views if contents were to be examined, and "ideologies pointed out".

2.6 GORE'S FOUCAULDIAN THEORY OF PEDAGOGY

The last approach I will review in this chapter is Jeniffer Gore's development of a theory of pedagogy based fundamentally on a Foucauldian account of power. This project is still in an early stage, but the insights produced are relevant for my present purposes, and it is quite different from most of the approaches reviewed here. Gore's starting point is a vigorous critique of critical and feminist pedagogies and of their potentially oppressive elements, which according to her are the result of an inadequate theorisation of power (see Gore, 1992 and 1993). However, instead of immediately postulating an alternative, she has sought to use refined empirical techniques to study what is happening in actual classrooms, as a means of enriching her theoretical and philosophical reflection. The actual focus of her empirical studies will be the interactions between teacher and students and the manifestations of power through them. As she puts it,

Although [critical and feminist pedagogy] discourses claim alternative pedagogies characterized, in part, by more democratic relations between teachers and students than found in more traditional classrooms, my analysis of literature in these areas showed that whatever was unique about critical pedagogy or feminist pedagogy did not appear to lie in different instructional practices. (1995, p.101)

In fact, she has additionally argued that these discourses are very strong in critique, but

rather weak on the design of instruction (1997a and 1997b). This criticism is similar to my own idea, expressed in subchapter 2.3 and especially 2.2, that the specification of what dialogue means was rather vague in those approaches, allowing critical pedagogy theorists to assert that their practice is dialogical while at the same time making sure that it conveys a certain predefined message (see also my discussion in Mejía, 2001).

To make up for this problem, Gore will, as she says, go back to schools to study those pedagogical relations and particularly the ways in which they actualise power. Her emphasis will no longer be wider societal relations, but the everyday happenings of the classroom. Actually, following Bernstein (1990) to a certain extent, she attributes some specificity and independence to the kind of power operating through pedagogical relations: "Pedagogy is more than a relay for power relations external to itself, i.e. pedagogy is not just a means of transmitting, for example, race, class and gender relations. Rather, pedagogy seems to carry its own set of power relations" (Gore, 1997a, p.213). This study of pedagogical interactions at the micro-level accords with Foucault's notion of power:

In thinking of the mechanisms of power, I am thinking rather of its capillary form of existence, the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their action and attitudes, their discourses, learning processes and everyday lives. (Foucault, 1980, p.39; quoted in Gore, 1995, p.99)

In what follows I will give a brief account of the notion of power as used by Gore, to then examine what it is that she can observe in classrooms and its relation to knowledge imposition.

2.6.1 Power

Gore starts from the Foucaldian idea that in modern societies power is effected in a pervasive but almost invisible way. Old forms of overt coercion would have been

replaced by normalisation, by means of techniques of continuous and exhaustive surveillance, and the shaping of the individual behaviour to bring her/him to a norm—that so defines normal individuals—legitimised by dominant disciplinary forms of knowledge. This would have represented a change from the sovereign power of the rulers, exercised in a way which made it highly visible as a show of force (see Foucault, 1977). However, as that manifestation of power became intolerable in European societies, a new way of exercising control appeared whose main characteristic then became its subtlety and invisibility. It would be now exercised in *minor*, everyday, and therefore non-apparent relations, and actualised in actions which directly take place on the individual. Various kinds of activities are related to this form of power: Among them are surveillance, classification, and normalisation. Another important characteristic is that it operates on the body, by means of what has come to be called *technologies of the self*. And, finally, power is not a property of the powerful that can be shared (Gore, 1992), but only exists in action:

Power must be analysed as something which circulates, or rather as something which only functions in the form of a chain. It is never localised here or there, never in anybody's hands, never appropriated as a commodity or piece of wealth. Power is employed and exercised through a net-like organisation. And not only do individuals circulate between its threads; they are always in the position of simultaneously undergoing and exercising this power. They are not only its inert or consenting target. They are always also the elements of its articulation. In other words, individuals are the vehicles of power, not its points of application. (Foucault, 1980, p.98; quoted in Gore, 1992, p.58)

That is a reason why it is the interactions at the classroom level which became the object of study, rather than relations between social groups and the study of their relations as they are manifested in interactions outside the classroom.

2.6.2 Categories of Power Relations for Empirical Observation

Gore's main purpose can be said to be the construction of a theory of pedagogy (1995 and 1997a). For this reason, she undertook an empirical study that attempted to elucidate how particular pedagogical practices are related to particular effects of power. One of the questions she wants to address with it is whether the actual pedagogical practices of radical or feminist pedagogues are any better than those of mainstream ones in that respect. At a more general level, the hypothesis is that power is inescapable, and therefore that it must be present in both radical and mainstream contexts.

Now, the observational categories by means of which Gore will study power relations are taken directly from Foucault's work, and more particularly from his book *Discipline* and *Punish* (1977). She has actually developed a primary and a secondary sets of categories. The primary ones are the following (Gore, 1995, p.103):

Surveillance: Supervising, closely observing, watching, threatening to

watch, avoiding being watched

Normalization: Invoking, requiring, setting or conforming to a standard,

defining the normal

Exclusion: Tracing the limits that will define difference, boundary,

zone, defining the pathological

Distribution: Dividing into parts, arranging, ranking bodies in space

Classification: Differentiating individuals and/or groups from one

another

Individualization: Giving individual character to, specifying an individual

Totalization: Giving collective character to, specifying a

collectivity/total, will to conform

Regulation: Controlling by rule, subject to restrictions; adapt to

requirements; act of invoking a rule, including sanction,

reward, punishment

Space: Setting up enclosures, partitioning, creating functional

sites

Time: Establishing duration, requiring repetition, etc.

Knowledge: Controlling, regulating, invoking knowledge

Self(/r/t/s): Techniques/practices directed at the self by researcher,

teacher, or student

The construction of the theory of pedagogy would allow for the characterisation of different kinds of pedagogies, in terms of the ways in which power is expressed.

2.6.3 Knowledge Imposition in Gore's Theory of Pedagogy

Attempts to Prevent Knowledge Imposition

Gore's hypothesis that power is inescapable suggests that its effects are also unavoidable. As one such effect, I will now argue, is knowledge imposition, it can be said that the hypothesis suggests that it is not possible to prevent it from happening. In fact, the Foucauldian idea adopted by Gore that power is not only repressive but also productive, suggests that it does not make sense to eliminate power, and that that goal is only an "impossible fiction" (Walkerdine, 1992).

Let me now mention two points regarding the relevance for the issue of knowledge imposition of the theory of pedagogy Gore envisages and the categories she uses, even if only as a means of studying it. The first one concerns the relations between those categories and knowledge imposition. In a general sense, it can be said that any mechanism that makes students' bodies docile also influences them so that they become submissive in terms of thinking. There are, however, some categories that seem more directly related to knowledge imposition than others, in that they specifically attempt to shape the consciousness of students. *Knowledge*, for instance, refers specifically to ways in which students' beliefs are shaped without their critical participation. About other categories, it may be useful to distinguish *instructional* from *regulative discourse* (Iedema, 1996). The former refers to the subject matter that the classroom interactions are about, whereas the latter concerns the ways in which the teaching and learning

activities are produced and maintained. This way, when *normalisation* and *exclusion*, for example, take place in instructional discourse, they will also directly affect the beliefs of students in a way which is predefined by the teacher—e.g., accepting *normal* forms of knowledge and rejecting *deviant* ones.

The second point is that even if it is impossible to escape from power, it is possible to have more or less repressive forms of pedagogy, or to have them in different ways. For instance, Gore has actually said that in her preliminary studies there is evidence that "of all the techniques of power studied, radical pedagogy, particularly in the teacher education site, was most strongly characterised by normalisation" (1997a, p.218). This suggests that it is possible to deal with knowledge imposition in different ways, and to perhaps prevent some instances of it even if at the expense of producing others.

Despite their very different philosophical orientations, it can be said that actually Gore's and Young's approaches bear some similarities (see subchapter 2.5). For instance, both of them take as their objects of study the form taken by the pedagogical interactions in the classroom or in other contexts of knowledge production and/or reproduction, but do not deal with particular ways of identifying or questioning contents. Additionally, arguably some of the categories used by Gore refer to similar types of pedagogical interactions as those referred to by Young.

Criticisms Related to Knowledge Imposition

In the literature reviewed I did not find any substantial critique which specifically addressed Gore's proposal. For instance, Gur-Ze'ev (1998), in his discussion about the positive utopianism of some radical approaches—explained above in relation to critical pedagogy—mentions by name some of the authors his criticism refers to. Among them is Gore. However, given the review above, and particularly the facts that Gore does not propose an ideal classroom pedagogy and that she does not directly mention contents but only ways of dealing with them, I think that Gur-Ze'ev's criticism about her work is simply misguided.

Nevertheless, it may be worth asking whether some of the criticisms addressed at other

approaches have something to do with Gore's Foucaldian approach. In particular, it seems that the fact that it does not directly deal with the contents of instructional discourse makes it vulnerable to the criticisms raised by critical pedagogy theorists about approaches "obsessed with method" (see Aronowitz, 1993; and Giroux, 1980a and 1983a). The criticism is not that the choice of pedagogical method and of ways of structuring classroom relations are irrelevant; it is rather that it is not enough because it cannot deal with certain issues that may be too subtle and not become apparent in those interactions. In particular, critical pedagogues are thinking about socio-political issues, and one of the reasons these worry them is that they need to be addressed if they are later going to be acted upon. Let us recall that this criticism was also levelled at Young's work, by Maddock (1999) and others.

2.7 SUMMARY OF THE ARGUMENTS REGARDING KNOWLEDGE IMPOSITION

This final subchapter attempts to bring together the findings corresponding to each of the critical approaches in pedagogy reviewed, concerning their relation with the problem of knowledge imposition and the development of autonomy of thinking.

The first approach reviewed, that proposed in the Critical Thinking Movement, seeks to develop philosophical theories—particularly logical, dialectical, or rhetorical—and teach them to students so that they learn the skills and acquire the dispositions needed to assess arguments—and a fortiori theories, claims, and even worldviews. In relation to knowledge imposition the idea is that if students learn these theories and use them as tools, they will then question forms of knowledge that are presented to them. Hence, they will take responsibility of their acceptance or rejection, and then those arguments will not be imposed on them. Now, the theories of argumentation and/or logic used by this movement would be neutral in relation to the arguments or forms of knowledge that are assessed with them. The main criticism found in relation to knowledge imposition consists in the lack of power of those tools for identifying and therefore questioning

those aspects of the message that are hidden and that therefore do not form part of the "net of strict logical analysis".

Paulo Freire and other authors in Critical Pedagogy will also use the strategy of giving students tools with which they can question other, external in relation to the classroom, forms of knowledge—mainly the so-called *dominant* ones. Freire's notion of *critical* consciousness, for instance, defines a state of consciousness in which students are now able to properly question both reality and the presumably distorted views espoused by those in power. Those views will then not be imposed on them, as they are not naïve anymore. There is, however, another way in which these authors seek to prevent knowledge imposition, and it is by organising the classroom interactions in such a way that students are allowed to voice their views, and be listened by the other participants in conversation. In this way, the teacher will no indoctrinate students into her/his own ideology, but instead will help them develop their views, at the same time that s/he develops her/his own. It can be said that whereas in the first strategy the addressees are the students themselves, who learn to use tools that enable them to question forms of knowledge, in the second the addressees are teachers or other persons with the possibility to design or redesign the organisation of classroom interactions. One strong criticism concerns the fact that the state of consciousness that allows the questioning to occur, in the first strategy, carries with it an ideology. On the one hand this ideology will be indoctrinated in the very process of empowering students, and on the other hand it may not be sufficiently comprehensive so as to include all relevant aspects and social positions like, for instance, those of women.

Other authors in critical pedagogy have relatively recently tried to develop an approach that does not commit to particular ideologies, therefore not demanding their adoption by students, and that extends their critique to cover all, and not only one or two, forms of domination and oppression. Arguably they see themselves now as seeking to articulate silenced or repressed knowledges, making them publicly available for adoption, but at the same time critically questioning both them and the dominant ones. However, the criticisms seem to not have been mitigated in comparison to early critical pedagogy, as there is apparently still the need for a positive vision of the future that serves as a standard from which other views are seen and judged. And even if one limits oneself to the articulation and critique of dominant and alternative views, then those very

articulation and critique may carry with them the acceptance of a particular ideology or position. Now, critical pedagogy does at the same time also promote non-hierarchical interactions in the classroom. This dimension, however, and similarly to Freire and early critical pedagogy, has not been developed much.

In post-radical pedagogies there is a further displacement of standards against which particular views or positions can be contrasted or judged. In fact, there is no promotion of such standards. The preferred strategy consists in the continual articulation of further textual possibilities which have been repressed and remain hidden. The emphasis, however, is not put on the wider societal political issues that surround the classroom, but on the text itself. A problem that appears is one which was also present in critical pedagogy, but in a reduced way: By not pointing at specific political issues, it is possible that they will never come to the fore and be discussed, and hence it is possible that the imposition of knowledge in that respect will not be prevented. (In the case of critical pedagogy this criticism only referred to some particular political issues that were left out of the analysis, as in the case of gender issues in the Neo-Marxist approach espoused by Freire.) But, interestingly, what was just said in the previous paragraph about recent versions of critical pedagogy can also apply to post-radical pedagogies: The very articulation of alternative knowledges might be an expression of the articulator's ideological views. Now, and similarly to critical pedagogy's case, this strategy of the continual and fluid articulation of alternative views and interpretations can be proposed with regard to two possible audiences: Firstly, students might make use of them as tools to question forms of knowledge presented to them, and therefore not accept them uncritically. And secondly, teachers and others who can design or influence the organisation of pedagogical interactions in the classroom can use it with that purpose.

Neither of the two remaining approaches reviewed here, Young's Habermasian one and Gore's Foucauldian one, make any use of the strategy of giving tools to students, so that they can question forms of knowledge. This time they concentrate exclusively on the organisation of interactions. Gore is more pessimistic than Young as regards the possibility of creating a non-imposing type of interactions, which is partly due to her adoption of Foucauldian forms of theorisation. In Young's work, however, the ideal speech situation provides a kind of benchmark one can at least try to get closer to. Both

of them attempt, using various tools, to characterise real conversations in terms of various ideal descriptions of interactions that are regarded as symmetrical/asymmetrical, repressive/ non-repressive, etc. In this case, and assuming that their analyses are to a large extent correct, there would still be something missing from the picture of knowledge imposition: As they do not deal with contents, they do not teach how to identify and question forms of knowledge, and therefore some of these may remain hidden and be invisibly imposed.

3. REVIEW OF CRITICAL APPROACHES IN SYSTEMS THINKING

In this chapter, the last one of the first part and the third one altogether, I will review the arguably most influential systems approaches that have something to do with the problem of knowledge imposition—i.e., that have shown some concern for the problem of knowledge imposition in one way or another—mainly via the idea of criticality. As mentioned in the introduction, systems thinking is one of the three bodies of knowledge that meet in this project. This chapter therefore intends to provide a relatively thorough description of some of its possibilities as regards knowledge imposition, by means of an examination of some of its most important approaches. It has to be said that these approaches are in some sense generic and applicable across a range of social domains, and have not been directly designed to tackle pedagogical issues and problems. Even though some texts about reflections on pedagogical issues from a systems perspective are available in the literature (see for instance Banathy, 1991 and 1992; Gregory, 1993; Espinosa, 2000; and the special issue of Systems Practice, vol.8, no.3, 1995), I have decided to go to the more general level of the systemic approaches and forms of theorisation to be able to look more closely at the theoretical issues about criticality and knowledge imposition that surround the system idea.

It is also important to clarify that I have exclusively limited this review to approaches which have been labelled *critical*, or in some cases *emancipatory*, by their proponents or by other authors. At one point during this project, I had decided to also provide a review of other systems approaches which in one way or another could give more insights into the actual or potential relations between the *system* idea and the issues of knowledge imposition and autonomy of thinking. Some of the approaches considered for that purpose were Mason and Mitroff's SAST (1981) and Checkland's SSM (1981). Actually, Jackson (1990b) has argued that there is a critical kernel in systems

approaches which are not directly oriented toward emancipation as a central goal. Indeed, it can be said that this critical kernel bears some relation to the issues of knowledge imposition and autonomy of thinking, and as such those approaches could have been included here. Partly for reasons of space, however, I have finally decided not to include them here. Nevertheless, I take it that not much will be lost with this decision, though, for the ways in which these approaches may have something to do with knowledge imposition are replicated, in a much more elaborated manner, in the approaches that I have actually included in this review. Now, a further clarification is in place: Jackson (2000) calls some approaches *emancipatory*, leaving the adjective critical to refer to thinking at a meta-level—i.e., thinking which is critical about the use of the approaches. Other authors simply label all of them *critical*. This emancipatory concern is very closely related with the issues of imposition and autonomy, and in some cases with the particular forms of them which are of concern here: those related with thinking and knowing. I will be looking at the critical elements related to knowledge imposition in those emancipatory approaches.

I review here, in the following order, Critical Systems Heuristics (CSH) and boundary critique, Interpretive Systemology and phenomenological critique, Team Syntegrity, and Total Systems Intervention (TSI) and critical pluralism. In spite of these being methodologies, or methods, with a great emphasis on prescription and action, my interest is in the theories from which they were derived.

3.1 CRITICAL SYSTEMS HEURISTICS AND BOUNDARY CRITIQUE

In this subchapter I intend to examine what has come to be called *boundary critique*. It can be said to have been developed in, and to be a manifestation of, the approach known as Critical Heuristics of Social Systems Design, or in short Critical Systems Heuristics (CSH). This approach, developed by Werner Ulrich, is the result of using the *system* idea to provide the elements with which practice can be critically self-reflective; or, as

Midgley puts it, it is the marriage between critical and systems ideas (Midgley, 1997). It draws on Churchman's work in the systems dimension, and on Kant's and Habermas' in the dimension of criticality. As Ulrich explains, the main purpose of CSH is to provide a solution to the problem of practical reason; namely, that of how practice can be reasonable—and the added complementary question of how reason can be practicable. Or, more concretely, to the problem posed by the question "how can we rationally identify and justify the normative content of our actions?" (Ulrich, 1983, p.15) The Kantian idea of practical reason refers to that which is about what ought to be, as opposed to theoretical reason which is about what is. The problem of practical reason is, then, about how cogent argumentation can be possible in such practical cases requiring normative judgements, given that their validity can neither be justified empirically nor logically 18.

Ulrich's theorisation led him to the conclusion that the solution to the problem of practical reason can only be a negative critical one, one that only consists in the determination of the limits of our reasoning, in matters practical (i.e., about what ought to be). Given that Ulrich draws heavily on Kant's ideas of critique, it should not be a surprise that this negative character of criticality is strikingly similar to that of Kant's. In fact, it is Kant's a priori science which defines what a limit to reasoning or to justification is.

And here is where systems ideas come to the fore. The determination of these limits to practical reason in concrete cases is mainly based on Churchman's work on systems thinking (see Churchman, 1971, and 1979). They can be described by means of what Ulrich has called *boundary judgements*, which refer to the idea of a system as mainly defined by a boundary which is drawn on a space of elements, and which separates those elements within from those without. In this respect, Ulrich remarks that boundary judgements can be understood "as *whole system judgements*, i.e. the designer's assumptions about what belongs to the section of the real world to be studied and improved and what falls outside the reach of this effort" (1987, p.106). And, consequently, "the moment we change our boundary judgements as to what belongs to

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¹⁸ This is a conclusion taken directly from Kant's analyses, and in particular his distinctions between *a priori* and *a posteriori* judgements (and concepts), and between *analytic* and *synthetic* judgements. It then becomes a foundation stone for CSH itself. This will be explained in more detail later in this section,

the system of concern and what falls outside its boundaries the relevant facts and values change, too. For example, if we expand the system boundaries, new facts come into the picture" (2000, p.251). That is, once a boundary is drawn, there would be elements—or basic facts and values—which would have fallen within it and others which would have fallen outside of it. It would be in these boundary judgements that any argumentation about what ought to be, necessarily fails; that is, those are the points in argumentation where *justification break-offs* necessarily occur (see Ulrich, 1987).

Given the above, the problem of practical reason could be expressed, in a more operational manner, in terms of three concerns which can in turn be transformed into three aims that CSH sets out for itself. They are the following (Ulrich, 1987, p.105):

- 1. to provide applied scientists in general, and systems designers in particular, with a clear understanding of the meaning, unavoidability and the critical significance of justification break-offs;
- 2. to give them a conceptual framework that would enable them systematically to identify effective break-offs of argumentation in concrete designs and to trace their normative content; and
- 3. to offer a practicable model of rational discourse on disputed validity claims of such justification break-offs, that is to say, a tool of cogent argumentation that would be available both to "ordinary" citizens and to "average" planners, scientists, or decision takers.

Boundary judgements can now be used in a polemical way, to try to show when an argument about what to do in a given situation has gone beyond its possibilities of justification; that is, when it *claims too much*. In terms of this, the perhaps most important real-world concern that appears throughout Ulrich's books and papers is that of the potential discursive imbalance between experts and laypersons. That is, the problem of the existing asymmetry between these two groups of people in the possibility of arguing about matters of social concern, which gives rise to the imposition of both ideas and actions (social designs) by experts on laypersons.

given its central importance.

3.1.1 Basic Aspects about Kantian A Priori Science in CSH

To a large extent Ulrich's argument about the particular nature of boundary judgements that makes them suitable for critique, is based on two key Kantian distinctions; a prioria posteriori, and synthetic-analytic.

A starting point is Kant's remarks in the introduction to his *Critique of Pure Reason* (quoted in Ulrich, 1983, p.188): "Though all our knowledge begins with experience, it does not follow that it all arises out of experience." Effectively, Kant suggested that no knowledge of what is can be created out of experience alone, or out of reason alone, but "only through their union can knowledge arise". There would always necessarily be *a priori* components—those which do not have their origin in experience; and *a posteriori* components—those which do. A priori categories would be presupposed by accounts of experience, rather than derived from them. A priori concepts and judgements would be indispensable because of their organising role: "Experience is blind without guidance by general, organizing [a priori] concepts such as 'cause' and 'effect'" (p.190). This suggests, then, that the constitutive elements of what is widely known as a framework are a priori concepts and judgements¹⁹.

Another consequence of the a priori-a posteriori distinction lies in its connection with the problem of argumentation and the question about how judgements (or claims) are justified. This is, in fact, a central aspect of the problem of practical reason, and therefore argumentation remains a key concept for CSH. A priori judgements, because they are not derived from experience, cannot find proof in empirical observations of what is the case, in "what the senses tell us". Given that in the problem of practical reason the main question is that of how to cogently justify validity claims about what ought to be, this distinction becomes quite important.

The second key distinction is that between *analytic* and *synthetic* judgements. In Kant's *Critique of Pure Reason*, we find a clear and brief description of the difference between

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¹⁹ Even though in his 1983 book Ulrich does not use this notion in an explicit way, in more recent works something more similar to this idea of a framework is expressed by means of other expressions, such as "standpoint" (1987), and the "triangle" which connects boundary judgements, facts, and values (1998).

the two (quoted in Ulrich, 1983, p.193):

In all judgements in which the relation of a subject to a predicate is thought (...) this relation is possible in two different ways. Either the predicate B belongs to the subject A, as something which is contained in this concept A; or B lies outside the concept A, although it does indeed stand in connection with it. In the one case I entitled the judgement analytic, in the other synthetic.

If the predicate B is already contained in the concept A, then the judgement would not be adding any new knowledge. (It was already contained in A!) Basically, it would explain A in some way ("a triangle has three sides" might be said by a school geometry teacher, explaining this concept to her/his pupils). The idea that we get from this is rather interesting: According to this distinction, no knowledge of how the world is would be required for demonstrating the validity of any analytic judgement, because this demonstration would only lie in the realm of logic and meaning: At the most what is needed to show the validity of an analytic statement is knowledge of the laws of logic, and knowledge of the meanings of the sentence and the words in it²⁰. Synthetic judgements, on the other hand, have a predicate which adds something to the subject, and therefore *say something new*. In this sense, knowledge of meanings and laws of logic is not enough for assessing the validity of any synthetic statement.

Combining these two categorisations of judgements, there would be four options:

- A posteriori analytic judgements. Such judgements would not exist, for if a proposition is analytic then it does not say anything about how the world is, but only explains a concept.
- A priori analytic judgements. They would not be justifiable by appeal to experience, but to knowledge of logic and meanings alone. That is, they would be logically demonstrable.

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²⁰ I use here the expression "at the most", because there might be judgements (or propositions) for which the only meanings required would be those of logical particles. Consider Quine's "no unmarried man is married", whose truth value would be independent of the meanings or interpretations of "man" and "married" (Quine, 1953a, p.22). The philosophers' favourite "no bachelor is married" is not, of course, of that type.

- A posteriori synthetic judgements. Being a posteriori, experience would be necessarily required for their justification, and it would be sufficient when used together with knowledge of logic and meanings. That is, they would be empirically demonstrable.
- A priori synthetic judgements. They would constitute the most problematic type of judgements, because being a priori they would not be empirically demonstrable, and being synthetic they are not logically demonstrable.

If synthetic a priori judgements are neither logically nor empirically demonstrable, then they would be limits to the justification of our reasoning; they would be non-demonstrable assumptions or justification break-offs. These synthetic a priori judgements would not be, nevertheless, dispensable, since they are necessary organising judgements, and experience would be *empty* without them. The problem will be, then that

In as much as all empirical knowledge presupposes a priori concepts or a priori judgements the validity of which we cannot establish either logically or empirically, how can we justify such knowledge at all? And if we cannot ultimately justify it, how can we accomplish at least a critical solution, i.e., make sure that we do not succumb to an objectivist illusion? (Ulrich, 1983, p.198)

One central aspect of his solution to this problem of their justification will be based on the acknowledgement of those limits.

3.1.2 The *System* Idea, Boundary Judgements, and Justification Break-offs

As mentioned before, the system idea will appear in CSH as a derivation and elaboration on Churchman's work in systems thinking. A first important aspect is the claim that the way in which a system boundary is drawn is neither taken for granted as

something given, nor taken as a purely technical issue that can be solved by appeal to theory. What this effectively means is that the judgements about where to draw the system boundary—the *boundary judgements*—are now to be understood as somewhat arbitrary decisions whose arbitrariness should be revealed and discussed. In this respect, Ulrich complains that

Frequently, models of "systems" are presented as if the boundaries were objectively given, and the model itself does not tell us whether the boundaries in question have been adequately chosen. If the problem is discussed at all, it is seen merely from a modelling point of view: so as to facilitate the modelling tasks, boundaries are determined according to the availability of data and modelling techniques. (1987, p.106)

The main claim here will be that systems boundaries unavoidably involve a normative dimension, and therefore should not be taken as "objectively given". That is, even the description of "a system" as it presently is, what it includes and what it leaves out, should not be taken for granted as if it equalled what that system ought to be, what it ought to include and what it ought to leave out. In this way, the boundary of a system is now understood as a judgement, or more precisely a set of judgements. This clears the way for problematising the boundaries that have been chosen, in those two modes already mentioned: the *is* mode, about the actual present boundaries, and the *ought to be* or design mode.

The idea of a boundary as what can be problematised is still a little too abstract to have any practical use. It will achieve concreteness in the form of twelve categories, which are derived from the idea of a system, and which will be called the boundary judgements of any social system. They can be divided into four groups, namely, the sources of motivation (for a system S), the sources of control, the sources of expertise, and the sources of legitimation (1983, p.258). The first three groups refer to issues which are normally related to the group of people whom are called by Ulrich *the involved*, and the fourth group refers to the group of people who constitute *the affected* [but not involved]. The involvement mentioned here refers to the processes of decision taking in the design of any particular social system. This is, the involved would be those who can in reality take decisions about changes or the creation of a particular

system S. The affected would be those who, even though they do not have a say in the kinds of decisions about S mentioned before, still have to *live its consequences*. The twelve boundary judgements presupposed by any social system design are the answers it gives to the following twelve questions (1987, p.108):

- Who ought to be [or is] the *client* (beneficiary) of the system S to be designed or improved?
- What ought to be [or is] the *purpose* of S?
- What ought to be [or is] S's *measure of success* (or improvement)?
- Who ought to be [or is] the *decision taker*, that is, have the power to change S's measure of improvement?
- What *components* (resources and constraints) of S ought to be [or are] controlled by the decision taker?
- What resources and conditions ought to be [or are] part of S's *environment,* i.e. should not be [or are] controlled by the decision taker?
- Who ought to be [or is] involved as a *designer* of S?
- What kind of *expertise* ought to flow [or flows] into the design of S?
- Who ought to be [or is] the *guarantor* of S?
- Who ought to belong [or who belongs] to the *witnesses* representing the concerns of the citizens that will or might be affected by the design of S?
- To what degree and in what way ought the affected be [or are the affected] given the chance of *emancipation* from the premises and promises of the involved?
- Upon what *world-views* of either the involved or the affected ought S's design be [or is S's design] based?

The boundary judgements constitute, then, the minimal basis for the aforementioned normative dimension, which would be inherent to and unavoidable for any design of a social system. I am not going to examine in detail here where these twelve categories

come from, or whether they are necessary and sufficient²¹. Instead I want to highlight that the importance of this normative dimension consists in the fact that, in Ulrich's argument, it defines an area where no expertise is of any use for claiming argumentative superiority. This brings back the symmetry between experts and laypersons in terms of argumentative power about the specific issues that define a system boundary. Nevertheless, in other areas Ulrich seems to grant that expertise can really exist as an argumentative advantage, and this would be what allows for the labelling of some people *experts*. The point seems to be, then, that this expertise is not enough for justifying social systems designs.

Now, according to Ulrich the boundary judgements are the a priori synthetic judgements of practical reason. And this is the reason why justification break-offs occur precisely when trying to justify the choice of particular boundary judgements. When so understood, system boundaries are the limits of what one's rationality has achieved for a given situation: What has been left outside corresponds to those elements which one has chosen not to, or has not been able to, take into account. The acknowledgement of reason's finitude in CSH is what led Ulrich to the formulation of a critical solution to the problem of practical reason. The picture thus provided is that of a large number of elements (potentially infinite), which are impossible to take into account in their totality for different reasons. Because of this, a boundary has to be drawn which represents one's limits. This way, "our boundary judgements determine the partiality (selectivity) which is inherent in all our claims to rationality" (1998, p.6). And of course *partiality* only makes sense if it is contrasted with the *totality*, and *selectivity* only makes sense if there is a set of all the elements out of which some are selected.

3.1.3 Other Developments in Boundary Critique

I want now to simply mention the existence of developments in the theory of boundary critique, which have been made outside of CSH. The main author here can be said to be

²¹ This is an interesting issue, given that the argument for how these categories are obtained is not so neat in my opinion as other parts of Ulrich's general argumentation. The reader can follow it in Ulrich, 1983,

Gerald Midgley, who has taken up boundary critique as the central element of criticality in his version of critical systems thinking. One interesting contribution by him consists in the use of the boundary idea to explain social processes of exclusion (see Midgley, 1992). With help from anthropological theoretical elements and insights, he has argued that when groups in society hold conflicting viewpoints—and therefore make different boundary judgements and focus on different systems—there is a tendency for the conflict to be stabilised by social rituals that end up privileging some systems definitions and the boundaries they entail, thus leaving out other elements. A primary boundary around central common features of the viewpoints in conflict is formed, but a secondary outer boundary is also formed which, apart from the elements within the primary boundary, includes elements only properly taken into account by one of the viewpoints but not by the other. There is, thus, a marginal area between the two boundaries. If the primary boundary somehow becomes the focus of privilege, for instance as the effect of power relations, then the elements in the marginal area are said to be *profane*, and are destined to effectively be marginalised. If otherwise it is the secondary boundary which becomes privileged, the elements in the marginal area are said to become *sacred*, acquiring a special status.

Another point to highlight in Midgley's developments on boundary critique concerns his argument as to the need for a process systemic philosophy that avoids committing to contents—as any form of content philosophy would—and instead attempts to be critical of them (2000). Contents could be about the world, reality, etc, or about *knowledge generating systems* which produce knowledge of reality. The basic idea stems from Midgley's observation that other approaches attempting to be critical normally base their critique on some theoretical conceptualisation of the knowing subjects as part of knowledge generating systems, and then use this conceptualisation to show the limitations of the knowledge thus created. But in so doing, their theoretical conceptualisations necessarily constitute new objects, and therefore knowledge that one should be critical about. Indeed, he seems to regard as suspicious any form of knowledge in which truth claims are made (see Midgley, 2000, pp.73-74) One example of such new objects constituted is *language* (see quote just below). Instead of this, he proposes to take as analytically prime the *process* by which knowledge is created, both

mainly chapter 4, sections 3.2 and 3.3.

about reality and about knowledge generating systems. In this respect, he has said about his own earlier position that took language as prime that

the position I ended up with is simply a truth claim about the nature of language, and truth claims (in terms of the theory) relate to the external, natural world of objects. Therefore we are left with a rather paradoxical relationship between language and physical reality, creating the suspicion that I simply created a new recursive form (or dualism) of 'language/object', with the subject marginalised.

(....) It is my contention that all theories of language are, by definition, truth claims. Indeed, in a critique of his own previous work, Gergen (...) reached the same conclusion. He said it was paradoxical that, in a desperate rush to escape naïve objectivity, he created a new object—language. (...) I believe we need to take a more critical look at what we are doing. (Midgley, 2000, pp.74-75)

As Midgley intends his process philosophy to make no truth claims at all, and therefore to commit to no views at all, if he is successful in his attempt then no claims or views can be imposed by the application of a proper, process-philosophy-oriented boundary critique.

3.1.4 Knowledge Imposition in CSH and Boundary Critique

Attempts to Prevent Knowledge Imposition

It may be clear by now that criticality in CSH is strongly based on Kant's work, which stresses the idea of critique as an inquiry into the limits of reason. But there is also an emancipatory critical element present in it, related with the prevention of knowledge imposition: When discussing the design of a social system, it frequently happens that

experts are brought into the discussion by those with power and money to hire them, to give their opinions, and these are accepted as if they were correct precisely just because they come from experts. In a way, designs of social systems supported by the experts, would be imposed on laypersons who feel that they cannot participate in discourse with the former, because of their lack of competence; that is, because they are not experts. The possibility CSH opens up for them to be able to emancipate from the experts' opinions consists in the polemical use of the twelve boundary questions in two modes (to be and ought to be). According to the argument, the expertise of the experts is of no use when attempting to justify their chosen boundary judgements, as expressed in the following quotation (1987, p.111, italics added):

No amount of expertise or theoretical knowledge is ever sufficient for the expert to justify all the judgements on which his recommendations depend. When the discussion turns to the basic boundary judgements on which his exercise of expertise depends, the expert is no less a layman than are the affected citizens.

The polemical use of the twelve categories is what would counter-balance the competence asymmetry in discourse between experts and laypersons, and which would allow the latter to take an active position when debating designs of social systems. This counter-balance does not occur by means of an increase in the competence of laypersons for stating rationally justifiable judgements, but by revealing the in principle unavoidable lack of competence when referring to boundary judgements. It is, then, a purely negative solution which comes in a direct way from the Kantian negative formulation of critique as the inquiry into the limits of reason. In this respect, Ulrich says (1983, p.305):

[The polemical employment of reason] entails no positive validity claims and hence requires neither theoretical knowledge nor any other kind of special expertise or "competence". (...)

For this merely critical purpose, it is quite unnecessary to prove or even to pretend that a polemical statement may not be false or merely subjective. What matters is only that no one can demonstrate the objective impossibility (and hence, irrelevance) of a polemical statement any more than its proponent can demonstrate its objective necessity.

Now, having said all this, a hint of a possible form of justification does appear in CSH. Actually, Ulrich suggests that once the normative content of a proposed design for a social system has been revealed, the actual agreement of those affected by it—those who will have to live its consequences—is necessary as its only possible form of justification: "The normative content [of the answer to the question of what the boundaries should be] can be justified only through the voluntary consent of all those who might be affected by the consequences" (1983, pp.226-227). negative" solution of the problem of the boundary judgements which establishes only a requirement to reveal the normative content, is complemented by a positive solution to the problem of their justification. But it is not reason which determines this justification, but a consensus-like principle which resembles more the Habermasian model of rationality than the Kantian one. Although there is no explicit discussion about what a true consensus or consent would be, it is possible to infer that at least it requires knowledge about the impossibility of demonstration of certain elements—the boundary judgements—in the design of social systems, and what those elements are.

Ulrich's basic idea that there are always necessarily justification break-offs in proposals for designs of social systems, constitutes the main element in CSH for the prevention of knowledge imposition. If laypersons learn to use the tools provided, then they will not accept as valid the claims made by experts concerning social systems, only based on the fact that they are experts of some kind. That is, the forms of knowledge represented in the experts' views will not be imposed on laypersons, who will now be able to question their validity in a proper way.

I take it that Midgley's idea that a boundary critique based on his process philosophy makes no truth claims—precisely because it commits to no contents at all—plays the same role in the justification of the approach as a non-imposing one, as Ulrich's claim that the tools provided by CSH are commonsensical and entail no positive validity claims.

Criticisms Related to Knowledge Imposition

Even though CSH has attracted several criticisms (see for instance Jackson, 1985 and 2000; Willmott, 1989; Mingers, 1992a; Romm, 1995; and Midgley, 1997 and 2000), it seems to me that only a few are relevant for the present discussion about knowledge imposition and autonomy of thinking. One of them is made by Jackson, who argues that "Ulrich's work allows us to reflect upon the ideas that enter into any social systems design, but it does not help us reflect upon the material conditions that give rise to those ideas and which lead to certain ideas holding sway" (1985). Flood and Jackson (1991) and Mingers (1992a) make a similar point. At a first glance, if those ideas are made visible and can be questioned anyway, it would not seem necessary to reveal the material causes of their adoption in order to prevent their imposition. However, this may be simplistic, at least because without tackling the material causes nothing guarantees that the risk of imposition of the same or similar forms of knowledge will not continue to appear.

Another criticism is made by Romm (1994, and 1995), who questions the justification a systems practitioner may have for deciding that in a situation there is some kind of oppression and that s/he must then help the oppressed: "On what basis do researchers decide that a set of people are unduly disadvantaged in society, that others are benefiting at their expense, and that this scenario is best dealt with by supporting the apparently 'powerless'?" (1994, p.24; see also Jackson, 2000). Interestingly, this remark is related to the problem of the determination of the validity of assertions, which is a central issue for CSH. This time, however, it is not assertions about proposals for social systems, but assertions about social and political conditions—and particularly power relations—of particular situations. Now, an additional feature worth paying attention to, is the possibility that the systems researcher's views about power relations in a situation may be related to, or depend on, her/his own ideas about what the social system in question should be like. In this case, acceptance of the researcher's critical assessment by others may imply the acceptance of at least part of her/his proposal for the social system design.

There are two last points I want to mention, which I have argued elsewhere (see Mejía,

2001). One of them concerns the possibility of the imposition of the very beliefs that constitute the theorisation that gives rise to the methodology. Ulrich seems to claim that these tools are commonsensical and therefore do not constitute a new competence or skill. If this is so, then everyone with common sense would be able to use them without this implying that s/he commits her/himself to holding valid some form of knowledge—which might therefore be imposed on her/him. In this respect, about his conclusion that "when the discussion turns to the basic boundary judgements on which his exercise of expertise depends, the expert is no less a layman than are the affected citizens" (1983, p.306), Ulrich says that

No expertise or theoretical knowledge is required to comprehend and to demonstrate that this is so. The necessity of boundary judgements can be intuitively grasped by every layman (...). It is equally understandable to every citizen that such boundary judgements depend on values or interests rather than on theoretical knowledge alone, and that no amount of expertise but only the consent of the affected citizens can justify the practical consequences of the expert's value judgements. (ibidem)

It is somehow surprising to me that, after a very complex argument even to the eyes of people who are used to reading about systems ideas and philosophy, Ulrich claims that this is something everyone can "grasp intuitively" and that some of the twelve categories "appear immediately plausible to common sense" (ibid.). That is, even though concepts like client, decision maker, and purpose are very common in our present day societies and thus may be easily understood, the argument according to which there are boundary judgements, and these are some of them, and no expertise can exist about them, and so on, seems far from commonsensical, let alone undisputable. Moreover, it could even produce a tension or be contradictory with beliefs implicitly or explicitly held by some people about various notions like citizenship, authority, ethics, democracy, and so on.

Now, Midgley's process philosophy seems to try to provide a way out of the problem of being a form of knowledge that could be imposed on those people it is trying to help; and it does so by attempting to produce no truth claims, and therefore no forms of knowledge that constitute objects. However, if all that is needed to have content and

objects is to hold beliefs or to use sentences in an assertive way—like the ones used in the theory underlying CSH, or the ones Midgley uses in his book and papers, or the ones I am making here—then process philosophy would not escape the fact that it is in itself a form of knowledge that could be imposed. And the *object* created by it—if one wants to speak that way, I follow Midgley—would simply be what those claims or beliefs are *about*. Rorty, for instance, has argued that the aboutness of sentences does not imply Reality with a capital R, and is not the same as representation or correspondence (see Rorty, 1988a); it would be the simple aboutness of sentences, in which something is predicated of, or about, the grammatical subject. Content would be the content of those claims or beliefs, and talk of process would be content about process. As these are issues I will be explicitly or implicitly discussing in this document later, I will not pursue the argument further here.

The second and last point concerns the critical knowledge produced when applying the tools of CSH and boundary critique. Let us notice that CSH provides a set of questions but it does not suggest what the range of possible answers to those questions might be (what possible purposes there might be, what possible clients, what possible forms of relevant expert knowledge, etc.) Not suggesting anything to consider implies that forms of knowledge unquestioningly and tacitly held by the participants might be maintained. For instance, feminists have helped the rest of us realise the extent to which women's interests have been left out in many situations, in contexts for which it simply had not occurred to us that gender was a significant variable—and for which therefore one would not have described women and women's interests as either inside or outside the boundaries of social systems designs. The question about women was just not there. Only asking the question about boundary judgements does not seem enough to actually identify those concrete boundaries. But how could CSH suggest anything at that level, if that depends on the particular situation surrounding each case of analysis? I think this response in terms of the specificity of individual situations is a reasonable one; nevertheless, it does not solve the problem. It is true that what is relevant is determinable only by looking at the specificity of the situation. But it is not true that what is relevant is determinable by only looking at the specificity of the situation. For those limits may not necessarily become visible on the pure basis of asking the questions on boundaries and reflecting on them in the particular situation. They will most likely become visible when someone else—e.g., feminists—points them out.

I take it that something similar occurs to process philosophy. For instance, in one of Midgley's examples he suggests that

there is a conflict in many Western societies between the liberal discourse of citizenship (where all people are seen as having equal value because of their status as rational beings) and the capitalist discourse of good employment practice (which limits the responsibility of organisations to their employees alone). (....) If unemployed people were to be fully included along with employees in the primary boundary of industrial organisation, 'good employment practice' (indeed the whole capitalist system of organisation) would become untenable. (Midgley, 2000, page 145)

Midgley effectively suggests that the boundary of concern of liberal discourse is wider than that of capitalism with respect to this issue. But this depends, of course, on how one interprets the discourses of liberalism and capitalism. For example, people strongly in favour of capitalist and neo-liberalist positions who advocate less onerous responsibilities to be set on private companies—in terms of tax, salary and employment regulations, etc.—might disagree with this way of establishing the boundary. And they would do it based, for instance, on the role of private interests of entrepreneurs in the creation of more jobs and more wealth *for the whole society*. The point is that this process of identifying boundaries is not unproblematic, and it itself depends on, or may be affected by, views held about what is being talked about.

3.2 Interpretive Systemology and Phenomenological Critique

Interpretive Systemology appears as the result of the efforts by Ramsés Fuenmayor and a group of other academics at the University of Los Andes, in Mérida, Venezuela. With

a philosophical background mainly based on the phenomenology of Husserl and Heidegger, Interpretive Systemsology seeks to overcome what its proponents see as a problem of Interpretive Systems Thinking: "the trap for an interpretive systems approach is the lack of a persistent critique of its own foundations against the ground of the foundations of a positivist instrumentally driven science and technology" (Fuenmayor and López-Garay, 1991, p.409, italics in the original). As pointed out by various authors, this lack of a critique would lend interpretive approaches to being used to legitimate decisions which are actually only in the interest of the powerful, as having been the consensual outcome of genuine debate (see Jackson, 1991, and 2000). Furthermore, Fuenmayor and López-Garay actually argue that "while [soft systems thinking] claims that it is necessary to interpret human action according to the contexts of meaning or weltanschauungen which base and propel it, it has not devoted much effort to understanding and theoretically expressing the philosophical weltanschauung it is assuming" (1991, pp.412-413).

A corollary of this consists in the fact that Interpretive Systemology promises to take up some of the interests and concerns of soft systems thinking theorists and practitioners, and to carry out the interpretive project, but this time with a careful inquiry into its own basic ontological and epistemological assumptions. Given this, it shares with soft systems thinking the concern for the fact that in hard systems practice the objectives of the defined systems are not problematised, and must therefore be taken for granted. The idea of interpretation, which is precisely the element that in soft systems thinking will be used to allow for that problematisation of the definition of systems and their objectives, will also be central to the theorisation behind Interpretive Systemology.

I will start this analysis by examining the phenomenological ideas that give rise to the ontoepistemology that Fuenmayor and López-Garay argue is necessary for interpretive systems thinking, and from which the methodology proposed is presumably derived.

3.2.1 An Outline of the Phenomenological Background for Interpretive Systemology

The phenomenological background for Interpretive Systemology comprises mainly an account of how the individual being comes to be in and live a situation, and of how her/his knowledge is developed in it and about it. The analysis begins with the idea, espoused by Fuenmayor (1991a), that a being is always a being in a situation. Actually, in the process of living a situation, the being that *enters* it as a something that is to some extent new, and that does not totally accord with that being before entering it—the being-previous. In this process, the being becomes drawn towards the otherness of the situation. Actually, the situation could be neither totally new nor totally the same, for, curiously enough, in neither case it would be possible to recognise it as a situation. If it is totally the same, if there are no changes, then no contrast can be established between what has changed and what has remained the same, and nothing can be recognised as such out of this. If it is totally other, totally new, then nothing can be recognised, for recognising implies a re-cognition of something already cognised before. Now, it would be intentionality which would draw the being-previous towards that otherness of the situation: "Intentionality can be seen as the continuous struggle against otherness in order to make it familiar, i.e. for otherness to become being-previous" (Fuenmayor, Being-previous and otherness would thus constitute an essential 1991a, p.460). recursive element that can be described in terms of intentionality. Fuenmayor suggests, however, that this is only one side of the story—the story of the process by human beings of living situations in the world. This would be the situation as seen from a noetic view; that is, a view from the subject-side. From the object-side, there would be a noematic view.

The noematic view of the situation looks at the intentional objects that appear as the result of the being being drawn towards the otherness of the situation and the phenomena. The fundamental element here would be the *Distinction* (with upper case *D*). A Distinction would be constituted by another recursive pair of elements, depending on each other: a *distinction* (with lower case *d*), and a *scene*. In perception and understanding human beings would identify things, or objects, about which it is

possible to talk about, act towards, etc. To do this, one would distinguish, or pick out, things from the scene; that is, from what has not been distinguished. But the identification of any particular thing is, effectively, a distinction made of that thing in contrast with a scene—i.e., everything other than that thing, which is thus negated. I distinguish something in front of me from the scene of alternative possibilities, which only then I identify as a computer. The distinction is not, therefore, the same as the identification.

Now, and this is quite important, while the distinction can be pointed at, or *indicated* (1991a, p.466), the scene cannot; for indicating it would necessarily imply making more distinctions, each of them from a scene, actually losing the original scene from sight. Or, as Fuenmayor puts it, "the elusive being of the scene cannot be disguised under an identification (...). The scene is the essentially dynamic ground from which 'each' distinction is liberated" (p.468, italics in the original).

As I understand it, there would already be some choice, and therefore a reduction, when a distinction is separated from the scene. But, moreover, a further reduction would occur with the identification of a distinction as a particular thing, because that would only take a few aspects of the phenomena into account, thus leaving out the rest. In Fuenmayor's example,

Newton's First Law of Motion says, "Every body continues in its state of rest, or uniform motion in a straight line, unless it is compelled to change that state by force impressed upon it." Newton commands "the other" (...) to conceive in his/her mind certain abstract objects (body and force) which are determined by what the law says about them. (....) "Body" and "force"—and the theoretical properties that connect them—are that which phenomena is (sic) to be "identified" with. (....) Just the falling time "of the thing" is measured under ideal laboratory conditions. Any other quality or feeling about the "thing" is disregarded. (Fuenmayor, 1991b, p.476)

This would have a certain relevance as regards the idea of truth, which Fuenmayor argues that in reductionist science has become equated with a correspondence between a

thing, or something *out there* in the world, and a proposition. This would suggest as a corollary, according to Fuenmayor, that "there is for each phenomenon one and only one universal truth: since a thing is entirely determined in itself, the truth is the 'correct' description/explanation of such determination" (p.479). But he denies that a thing can be entirely determined by itself, given that it would only be one side of an essential recursive element: the Distinction. Given this, in order to be able to determine the possibility of the thing distinguished, the other side of the Distinction—i.e., the scene—must be explored. The search for truth is, contrary to reductionist science, the attempt to unfold the scene. The problem, as already mentioned, would be that the scene cannot be indicated. His proposal to overcome this problem will therefore be to explore various regions of it by means of an interpretive process in which different interpretations allow one to become aware of different aspects of the scene. The impossibility of getting to know the whole scene means that this interpretive process of unfolding, de-becoming, or opening it up, would be never-ending.

Interestingly, distinctions would be what is later identified with both *concepts* and *propositions*. However, although most of Fuenmayor's examples when he explains the *distinction* idea are about objects referred to *by concepts only*, later in his discussion about truth he essentially treats propositions in the same way. This is evidenced by the assertion "the proposition is the announcing (indication) of a distinction" (1991b, p.481). But it is traditionally believed that only propositions, or perhaps also sentences and beliefs, but certainly not concepts, can be vehicles of truth or falsity. This has not been really clarified, as far as I am aware, by interpretive systemologysts.

3.2.2 Overview of the Methodology

As Mingers (1992b) argues, the methodology of Interpretive Systemology does not actually differ very much from its ancestor, Soft Systems Methodology (see Checkland, 1981). The methodology is based on the idea that the unfolding of the scene of a particular interpretation of a situation—as represented by a system of distinctions—can occur by means of providing "other possibilities for what is present" (Fuenmayor,

1991b, p.482). These other possibilities are given by alternative interpretations. Importantly, the result of doing this is not only that new interpretations are made available, but also that a better awareness of the scene of the original interpretation is produced: "This uncovering not only enables the interpretation of that which is present within other contextual systems, but also makes feasible the recognition of some of the 'relevant regions' of the scene in which the original distinction took place" (p.483).

The methodology can be described as a process divided into two phases: understanding and comprehension. In the phase of understanding, the phenomenon under study is explored from one *context of meaning* or *thematic contextual system*, thus producing one interpretation of it. A contextual system would be a system of distinctions that allows for the construction of an interpretation of phenomena. The exploration of the phenomenon from a contextual system is only meant, however, to open up the possibility of finding more contextual systems from which new interpretations of the same phenomenon can be produced. It would be only with these alternative interpretations that regions of the scene can be explored.

In the second phase, a debate among the various interpretations is produced, in which they are also compared with the phenomenon under study itself. These debate and contrasting processes are said to not necessarily lead to an agreement over the actions to take, or over the interpretation or interpretations to adopt. Instead, "the result is a state of enriched consciousness about the possibilities of the phenomenon under study and its insertion into a general conceptual framework" (Fuenmayor, 1991b, p.487).

Mingers has described the process in very similar terms to that of Soft Systems Methodology:

Briefly, this consists of (i) developing a number of possible interpretations (...) of what the phenomena might be, (ii) comparing the phenomena with those different interpretations, and (iii) conducting a debate between the various interpretations, given the results of the comparison. (Mingers, 1992b, p.338)

Step (i) in Mingers' description corresponds to phase 1 as described by Fuenmayor, and

steps (ii) and (iii) to phase 2. Mingers actually mentions something that does not appear in Fuenmayor's brief description in the sources consulted²², but that nevertheless does appear applied in two case studies presented (see López-Garay, 1991; and Fuenmayor, Bonucci, and López-Garay, 1991): The comparison between the interpretations and the phenomena under study. Interestingly, any comparison of ideas and interpretations with phenomena can only occur if somehow those phenomena can be expressed in some way such that they become comparable with linguistic expressions such as those interpretations. As Fuenmayor himself asserts, quoting Heidegger,

The coin is made of metal. The statement ["this coin is round"] is not material at all. The coin is round. The statement has nothing at all spatial about it. With the coin something can be purchased. The statement is never a means of payment. But in spite of their dissimilarity the above statement, as true, is in accordance with the coin. (Heidegger, 1949, p.122-123; quoted in Fuenmayor, 1991b, p.479)

Later on, Fuenmayor goes on to argue that the accordance is really a recursive one between the distinction and the scene, or the "inner accordance of the 'Distinction'" (p.481). However, the comparisons that are made in the case studies mentioned, and particularly the case of Los Andes University in Mérida, are seemingly made from a vantage point which is external to the contexts of meaning from which the various interpretations to be compared with the phenomena were produced. Otherwise, how can that comparison be justified without any further clarification as to a vantage point from which it was made?

²² The papers appeared in various issues of Systems Practice and Systems Research and Behavioural Science in the 1990s.

3.2.3 Knowledge Imposition in Interpretive Systemology

Attempts to Prevent Knowledge Imposition

In his paper *Systems Thinking and Critique I: What Is Critique?* (1990), Fuenmayor discusses his idea of critique in relation with the phenomenological view that underlies the Interpretive Systemology approach. In a way, this is at the same time an explanation of why Interpretive Systemology should be considered a critical approach. Actually, Fuenmayor distinguishes various senses of critique. Of these, only transcendental critique is of real interest for my purposes here, insofar as it is this sense which corresponds more closely to the idea of criticality that relates to autonomy of thinking and knowledge imposition.

Critique is, here, a reflection about the way in which someone looks at reality, or "the progressive process of gaining awareness about our own 'state of mind' (scene) which is necessarily hidden in our judging (and acting in general)" (Fuenmayor, 1990, p.531). In other words, it is "the look of look", or the look at "how [an object] is experienced" (ibid.) Now, the essential recursive element of perceiving, understanding, or looking, as explained before, is the Distinction. This means that critique would have to disclose the two sides of the Distinction; but the distinction is what has been indicated. This leaves the scene as that which we are normally blind to, and as that which has to be explored in the act of critique. As said before, for Interpretive Systemology the exploration of the scene cannot take place in an exhaustive way, and the only possibility would be to investigate some regions of it by means of the use of alternative interpretations from alternative contexts of meaning, or the step two of the methodology. Given this, Interpretive Systemology would be an essentially critical approach. But as such, and given the impossibility of exhausting the investigation of the scene, critique would also This *neverendingness*, so to speak, is explained by be a never-ending process. Fuenmayor by the fact that when being critical, one would step backwards to look at the grounds where one was standing on—to look at one's look—while at the same time stepping on new ground and hiding it from view.

Now, in what sense can this relate to knowledge imposition and autonomy of thinking? Despite of the explicitly declared radical interest beyond Interpretive Systemology by its proponents, some authors have pointed out that this radical interest does not really exist in or is not actively supported by the theory of the methodology. It would have to be added to it as a personal commitment from its users (see Mingers, 1992b), but it might even be contradictory with the phenomenological philosophy adopted (see Jackson, 1992). However, I take it that the perhaps most important critical point in relation to knowledge imposition is the opening up of alternative possibilities that are brought forth in the process of unfolding the scene. By allowing for more possibilities, expressed in interpretations carried out from alternative contexts of meaning, the one entailed by a particular interpretation present ceases to look like the only option available. The individual user would be able, then, to liberate her/himself from the trap into which s/he was locked, where the trap would be constituted by the act of taking for granted a particular interpretation without noticing its limited character. This trap metaphor, which is taken from Vickers' work, is used recurrently in Fuenmayor's papers, and illustrates a central intent behind Interpretive Systemology.

Criticisms Related to Knowledge Imposition

Jackson (1992 and 2000) suggests that there is a contradiction between the claim by interpretive systemologysts that critique is a never ending process of opening up the scene, and their not-explicitly-declared closing of the scene, in practice, when they end up favouring one context of meaning over the others. This can be seen, for instance, in the case of the application of Interpretive Systemology to study the University of Los Andes, in Mérida (see Fuenmayor, Bonucci, and López-Garay, 1991), in which one rather Neo-Marxist context of meaning is adopted dismissing three others that had been originally explored. As Jackson rightly remarks, "of necessity, interpretive systemologysts have to subvert the phenomenological foundations of their approach in order to act, and especially to intervene critically" (1992, p.329). The idea is that action will necessarily be guided by some interpretation of reality, and therefore one such interpretation must be favoured each time one decides to stop reflecting critically to actually intervene in a situation.

I have just said in the previous section that the critical aspect of disclosing other possible alternatives was what allowed for the prevention of knowledge imposition in Interpretive Systemology. When the proponents of the methodology end up adopting a particular interpretation, and pass it as legitimate according to the theory, they are effectively favouring its imposition. When dismissed, alternative possibilities are no longer possibilities, and that connection between criticality and autonomy of thinking is lost. But what happens with knowledge imposition when there is no compelling need for action or intervention, and therefore no need to adopt a particular interpretation? There is something in the theory, which perhaps was left there to make room for action and intervention, which still permits favouring one interpretation over the others even if no action is specified: the possibility of comparing interpretations with the phenomenon under study, as further manifested in the fact that interpretations that seem to accord with the facts in a better way can be distinguished from those that do not (as is clear from the case-study of Los Andes University presented by Fuenmayor, Bonucci y López-Garay, 1991). But, moreover, the crucial point is the fact that there is no problematisation of the knowledge of phenomena, which is needed in order to be able to compare them with interpretations²³. This allows for an interpretation to have the possibility of being "closer to the facts", which in this case means "a better representation of the phenomena". The main point concerning knowledge imposition here refers to the fact that forms of knowledge that describe phenomena, as well as forms of knowledge about which interpretations better match those phenomena, might get to be imposed, because they are espoused by someone who is presumably being critical.

3.3 TEAM SYNTEGRITY

Using mathematical and cybernetic principles, Stafford Beer has developed a protocol for organising the interactions between persons who want to discuss a subject and produce knowledge about it (see Beer, 1994). This protocol has been called

²³ It can be argued that this also occurs in Checkland's Soft Systems Methodology.

Syntegration, which is a neologism referring to a synergetic integration. Protocols, in Beer's words, are "ways of working", and in this case the expression refers to a set of rules that guide the interactions between a group of people who share an interest in a particular subject, and who want to discuss it and develop it. This is a protocol "for conducting proceedings within [a] group to maintain its productivity and creativity" (p.21), designed in such a way that any outcomes or decisions coming out of this process are democratic, and that every participant has the same possibilities of influencing them. In general, the idea was that the protocol were useful for a relatively large number of people to discuss a general topic of their common interest, given that having them discuss it all together sharing one same discussion space proves to be unproductive and likely to be dominated by power relations.

Jackson (2000) has classified this approach as an emancipatory one, and particularly as one promoting what he calls discursive rationality, because its purpose is to produce a democratic form of conversation in which participants can more freely exchange ideas and advance their positions, without the inhibiting force of relations of power and authority between them. Of course, the protocol rules themselves are restrictions on what the participants can do, and these are in a way imposed on them. But what is important is that within those rules there is room for participants to behave as they wish without the others interfering in or hindering their participation. And it is this freedom which constitutes the emancipatory element in Team Syntegrity.

3.3.1 Basic Principles

Beer's solution to the problem of democracy in knowledge-production interactions is structural and, as said before, based on cybernetic principles. Beer reports that some original attempts to develop a democratic protocol were partly based on previous work by Alex Bavelas (1952), and particularly on his ideas about organisational structure and patterns of communication, as represented by the measures devised by him of *group dispersion*, *relative centrality*, and *peripherality*. These measures are based on the study of communication patterns, and specifically on who can talk with whom among a

group of people. In fact, this becomes a central characteristic of the Syntegrity protocol: that of specifying very well patterns of communication in terms of connections between persons who can talk to each other, rather than saying anything at all about what those conversations are or should be about. Another important concept is *tensegrity*, which means *tensile integrity*. The idea is to use the tension that may exist within a group of people, to reinforce the internal bonds and so to keep the group together. A last and most central concept is that of *reverberation*, which is a physical analogy for the effect that echoes of the ideas voiced by any participant during any sessions devoted to discussion, must be somehow felt throughout the whole structure of discussion.

Now, Beer made use of regular polyhedra, whose regularity guaranteed no distinctions between participants, to model the structure he was looking for. In the end, for a number of practical and theoretical reasons, the icosahedron was found to be the most appropriate, although a similar protocol using the octahedron has also been developed (see Beer, 1994). The icosahedron has twenty (20) faces, twelve (12) vertices, and thirty (30) edges. Each edge represents one participant, for a total of thirty. Each vertex represents one subtopic of discussion, but of course the twelve of them constitute the general topic that brought the thirty discussants together in the first place. As each edge links two vertices, each participant will be directly involved in the discussion of two subtopics as a discussant. However, apart from this role, each person will also participate in the discussions of two more subtopics, in the role of critic. The critic is someone who points at negative aspects of a discussion and thus help the group of discussants make it an enriching one.

3.3.2 Overview of the Protocol

The protocol guides an activity that usually takes a few days. It is divided into three main parts: the *Problem Jostle*, the *Topic Auction*, and the *Outcome Resolve*. The purpose of the Problem Jostle is to produce an agenda of topics for discussion, twelve in total, corresponding to the twelve vertices of the icosahedron. The thirty participants have gathered together because there is some general topic that they are interested in,

and that they would like to discuss. This is expressed in what is called the *opening* statement. However, this topic is chosen to be not too restrictive, and no specific agenda exists at the beginning; therefore, the group must generate its own. The participants here write and discuss Statements of Importance (SIs), which are statements relevant to the general topic, provocative in nature, and not necessarily directly expressing the proponent's opinion. Then, the participants discuss them to try to refine them and group similar ones together, producing new and better ones. At the end of the session there is a voting procedure by means of which only twelve are selected to make it to the next phase.

Then there is the Topic Auction. Each topic will be discussed by a group of five participants, who constitute its team, represented by one colour. Each participant will therefore be part of two teams, but additionally s/he will have to take care of two more topics in the role of critic. S/he will also be an observer for two more topics. The purpose of the Topic Auction is to allocate the participants to the topics in any one of the three roles, according to the icosahedral structure. There is a number of ways in which this can be done, but a common one now is that each participant orders the twelve topics in order of interest, and then this information is gathered and fed into a computer programme that then does the allocation maximising interest in the topics.

The third and last phase is called the Outcome Resolve. This is where the topics are actually discussed by the teams, and they do so in three sessions, intercalated with the sessions for the discussion of the other topics. At any given time, there are two topics being discussed, and therefore at least twenty persons participating in them (five team members and five critics per topic). The others can be either observing the sessions, without participating in them at all, or taking a break. At the end of the sessions in which the topics are discussed, which take a few days, a final statement is produced by each team. (Actually partial statements had been produced at the end of each session.)

The fact that each participant attends the sessions of six of the twelve topics, and that this occurs according to the icosahedral structure, means that s/he will be able to hear the opinions of everyone participating, except for one person. This in itself ensures that the reverberation effect will be important. Nevertheless, in order to enhance that reverberation and ensure that they two meet and exchange ideas as well, a further

meeting is arranged at the end of one of the days during which phase three takes place, called the *Orthogonal Meeting*, in which the whole group gathers together, but each participant sits in front of the person s/he has not had the opportunity to listen to.

At the end there should be, if applicable, an implementation of the actions agreed on during the Syntegration process.

3.3.3 Knowledge Imposition in Team Syntegrity

Attempts to Prevent Knowledge Imposition

As far as I know, knowledge imposition has not been explicitly discussed by Beer or his collaborators. The idea of democracy that Syntegration proposes seems to be more related to how decisions are taken and whose voices can influence them, than with how everyone is able to develop her/his own knowledge and beliefs. In principle, it could be said that even if decisions are taken in an autocratic way, knowledge imposition might not necessarily follow, if, for example, those left out of the decision still hold on to their own beliefs and do not accept those represented in the decision. But there is an important aspect that is related to knowledge imposition, even if not in such a direct way: If only the voices of a few are heard, it will only be those perspectives which will be available as sources of knowledge, and will probably become standards for criticism in the long run. In other words, doubting and questioning the forms of knowledge representing those perspectives may become difficult if no alternatives are made available. In this sense, Syntegration is specifically designed to give every person the same chance to talk and be heard, and the element of reverberation that is in-built in Team Syntegrity tries to amplify this effect.

Criticisms Related to Knowledge Imposition

In reports on particular applications of Syntegration, some authors have reflected on the White has remarked that there are no specific characteristics of the protocol. mechanisms which could involve those who are silent or inarticulate (White, 1994). However, more to the point of the issue presently discussed is Pearson's claim that the protocol is based "on the assumption that participants want to play (....) However, in practice, particular syntegrations will need to be designed to accommodate more or less unwilling or at least deeply sceptical participants. Enthusiasts will collaborate to make the process work. Cynics will not lift a finger to save it, and indeed may happily sabotage it" (Pearson, 1994, pp. 315-316). Even though what I am going to say is not directly implied by Pearson's remark, let me elaborate on this theme of the participants wanting to play. Pearson mentions this topic in respect only of sceptical participants, but there could be other cases in which the willingness to participate, clearly if not frankly, may be lacking for other reasons which may be important for knowledge imposition. For example, even if the opportunity to talk is given to someone, s/he may not do so with openness because s/he may feel less able for historic or other reasons, or feel that it is not worth it if the others will not really listen. Or, similarly, the lack of restrictions or specifications on contents implies that nothing guarantees that already imposed forms of knowledge will be detected or questioned in the process, and therefore that they do not pass unnoticed. In this latter case the problem does not arise necessarily due to a lack of willingness to talk, but perhaps due to lack of awareness of the participant about certain forms of knowledge in which s/he may be trapped. Interestingly, both points can also be associated to Jackson's (2000) claim that approaches like this "seem to require that the conditions for communicative competence are already present in society and that all citizens are equipped equally to take part in participative debate" (p.324).

3.4 TOTAL SYSTEMS INTERVENTION AND CRITICAL PLURALISM

Total Systems Intervention (TSI) is different from the other approaches reviewed here in some important aspects. One major difference is located at the level on which it works: Whereas in the other critical approaches the object of critical inquiry is the various proposals or views advanced by various persons about a situation, in TSI the object of critical inquiry is the various available systems approaches themselves. That is, TSI is critical about the use of the various tools, methods, and methodologies, that are proposed within the various systems paradigms. A central problem which is closely related with the development of TSI in this respect, is that of knowing what to do when facing a problem situation, and given the fact that there is a large number of systems approaches that could be used.

TSI is also characterised by its advocacy of a position according to which the development of all the systems paradigms should be encouraged, while at the same time it takes up the task of providing tools for a potential user to be able to critically reflect on and use them. Because of this, it is described as critical and pluralist, in contrast with other possible strategies known as isolationism, imperialism and pragmatism (see Jackson, 1987, and 1999). In isolationism, a practitioner, or researcher, would stick to one particular paradigm, and the methodologies developed within it, to tackle any situation s/he encounters. In imperialism the practitioner would adopt methods and techniques developed in paradigms other than hers/his, but translating them into her/his own paradigm language, forcing them to adapt to it. In pragmatism, the practitioner does not stick to one paradigm, but attempts to pick from them whatever seems to work, without any further theoretical examination. While similar to pragmatism, pluralism seeks to pick from the different paradigms, but basing this selection on a rigorous theoretical analysis of these paradigms. Of each of the paradigms it is said that they are always partial and not capable of claiming superiority over the others in all aspects and in all situations; each one would have strengths and weaknesses which must be recognised through a thorough analysis. The idea, then, is to combine the strengths of the different paradigms, and of the methodologies developed within each of them, while avoiding their pitfalls²⁴. The main proponents of the critical pluralist position are Mike C. Jackson and Robert L. Flood, who have developed the approach both theoretically and practically.

3.4.1 The Systems Paradigms

In 1984 Jackson and Keys developed a way of classifying *problem contexts* according to two variables which seemed to them to be particularly relevant. A problem context was "defined to include the individual or group of individuals who are the would-be problem solvers, the system(s) within which the problem lies and the set of relevant decision makers" (Jackson and Keys, 1984, p.139). The first of these variables is the systemic complexity of the situation, and two categories are established: (i) mechanical problem contexts—or systemically simple—which do not produce their own goals, and with few or at least regular interactions between their elements; and (ii) systemic problem contexts—or systemically complex—which are purposeful and whose behaviour cannot be explained by analysing what single elements do on their own. The second variable is the nature of the relationship between the participants in the situation. According to Jackson (1991), in a more refined version of this analysis, the problem context can be unitary, if participants are in "genuine agreement on objectives, share common interests, have compatible values and beliefs, and all participate in decision It can be pluralist, if there is disagreement and/or difference on the objectives, interests, values, and beliefs, but they are not irreconcilable, so that agreement is possible. Or, lastly, it can be coercive if there is fundamental conflict and there is no possibility of consensus without the exercise of power (Jackson, 1991, p.28). These two variables can be combined to produce six ideal types of problem contexts, namely simple-unitary, complex-unitary, simple-pluralist, complex-pluralist, simplecoercive, and complex-coercive.

This matrix was also used as a tool for examining, for each systemic paradigm or

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²⁴ Pluralism used to be referred to also as *complementarism*. Gregory (1996), however, has distinguished between complementarism and pluralism, recognising the incommensurability principle acknowledged by

methodology, the type of problem context they assume they work in. Therefore, a similar matrix can be constructed this time classifying the different methodologies according to those assumptions; this is the System of Systems Methodologies. Some of the methodologies which were classified are the following (see Flood and Jackson, 1991): Systems Analysis, Systems Engineering, and System Dynamics for simpleunitary problem contexts; Viable Systems Diagnosis and General Systems Theory for complex-unitary; Strategic Assumption Surfacing and Testing for simple-pluralist; Soft Systems Methodology and Interactive Planning for complex-pluralist; and Critical Systems Heuristics for simple-coercive. Flood and Jackson claim that there are still no methodologies addressing complex-coercive problem contexts (1991). The main dimension of this classification seems to be, however, that of the relations between the participants, and systems paradigms and methodologies are most widely regarded as belonging to one category among functionalist and structuralist (assuming unitary problem contexts), interpretive (assuming pluralist problem contexts), emancipatory (assuming coercive problem contexts). Flood (1995, mainly ch.3), for instance, has also mentioned four key organisational dimensions—namely processes, design, culture, and politics—remarking that particular methods have been developed to tackle problems in each of them. These four categories, as Flood goes on to say, can be seen as being represented each by one type of question (the first two representing 'how' questions, the third one 'what' questions, and the fourth one 'why and for whom' questions). This classification seems to be another way of putting the types of issues addressed by each of the systems paradigms identified before.

Originally, the idea seemed to be that intervention in problem situations could be guided by an inquiry into the particular problem context surrounding that problem situation, to then choose the most appropriate methodology for the context found. So, for instance Jackson and Keys say that their paper "develops a systematic analysis of problem contexts", so that "the methodologies most suitable for the different classes of problem context are identified" (1984, pp.139-140). Other authors, perhaps more explicitly, also went along the direction of the classification of problem contexts (see Keys, 1988; and Banathy, 1988). However, more recently it was argued that this is an erroneous way to use the matrix, partly because it would be functionalist, thus deviating from the pluralist

the latter but not present in the former notion. The term complementarism has been dropped now.

position advocated (see Jackson, 1990a; and Flood and Jackson, 1991). It is said that "the [...] categorization of problem contexts is made with the aim of grouping the different systems methodologies and is constructed with that end in mind. It is not meant as a grid into which different problem situations in the 'real world' can be easily fitted" (Flood and Jackson, 1991, p.32). And also, "SOSM is used to classify the assumptions made by problem-solving methods. It has nothing to do with classifying problem situations" (Jackson, 1993, p.289). This way, TSI renounces talk about the world, and its kinds of problem contexts. However, let us notice that the postulation of those kinds of problem contexts served the purpose of providing the grounds from which critical questions could be asked of any particular approach or methodology. But even having renounced that, new grounds were nevertheless found in the Habermasian theory of knowledge-constitutive interests (Habermas, 1968), as what could explain the existence of these different paradigms, as well as their limitations and potentialities.

Another step forward in this change is the loosening of the classification of systems methodologies, methods, and techniques, and its separation from the all-embracing and all-explaining Habermasian theory of knowledge-constitutive interests in favour of the acceptance of the independence of the paradigms and of the impossibility of rationalising them away. As Flood and Romm (1996) and Jackson (1999 and 2000) have acknowledged, the source of critical questioning of the various systems paradigms cannot be a meta-theory, but instead it should take place from each other, from the tensions that are created among them as the result of their different positions. This has allowed for the postulation by Jackson of a new systemic paradigm, namely a postmodernist one, which could not have been thought before, given that it would not fit within the Habermasian framework.

Furthermore, it is now acknowledged, mainly following a development by Flood and Romm what they call the *oblique* use of methods (1995 and 1996), that "all methods, models, and techniques can be considered, whichever methodology they were originally developed to serve, as candidates to support functionalist, interpretive, emancipatory, and postmodern rationales" (Jackson, 2000, p.383). I take it that this has actually led Jackson to the formulation of four generic approaches, each corresponding to one of the functionalist, interpretive, emancipatory, and postmodernist rationales, that can be taken as ideal types and that do not necessarily describe faithfully particular actual

approaches.

3.4.2 Overview of the Methodology

I will now briefly describe TSI as a methodology for intervention, as it appears in Flood and Jackson (1991) and Jackson (2000)²⁵. It is characterised as a cycle of systemic inquiry, and is constituted by three phases. These are *creativity*, *choice*, and *implementation*.

In the creativity phase the problem situation is explored creatively using tools that try to enhance the ability to see different aspects of it from different perspectives. One tool used for this purpose is a range of systemic metaphors, based on the work of Morgan (1986) on various views of organisation, plus other metaphors that can be created by the very participants in the intervention (see Flood, 1995). Importantly, Jackson suggests that at this phase it should be ensured, "minimally, that [the problem situation] is viewed from the functionalist, interpretive, emancipatory, and postmodern perspectives" (2000, p.393). It also should be clarified that the use in this phase of metaphors, or of any other creativity-enhancing tools, is exploratory. That is, it does not emulate the use of the actual methodologies; it only attempts to create insight about the problem situation, without having carried out the whole process of inquiry.

Once this creative exploration of the situation has occurred, in the *choice* phase it will be sought to select the most appropriate techniques, methods, or methodologies among the ones available, for its later implementation in the third phase. A main tool for this is the system of systems methodologies (SOSM), but other tools can also be used (see Flood, 1995; and Jackson, 2000) that relate the strengths and limitations of each of the paradigms to the problems perceived as the most important or relevant in the situation, as the result of the activities of the creativity phase.

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²⁵ Flood (1995) and Flood and Romm (1996) have provided other versions of TSI or related methodologies. For my purposes here, I will simply stick to Flood and Jackson's (1991) and Jackson's (2000) versions, trying to highlight relevant issues of the other proposals in the discussions to come in the next sections.

The *implementation* phase refers to the whole process of application of the tools, methods, or methodologies chosen in the previous phase. This actually closes a cycle, which can go on many times during the same intervention.

3.4.3 Commitments of Total Systems Intervention

This approach is said to be based on some commitments which act as a guidance for its development. Jackson (1991) mentions five such commitments, Flood and Jackson (1991) mention three, and Jackson (2000) suggests three, but with some changes. The five commitments in Jackson (1991) are *critical awareness*, *social awareness*, *human emancipation*, *theoretical complementarism*, and *methodological complementarism*. It can be said that the ones in Flood and Jackson (1991) are a grouping of those five, but the ones in Jackson (2000) do represent a refinement of the original categories. As I shall show below, some of these commitments are specifically taken care of by the methodology (TSI), whereas others are *borrowed* from other approaches in systems thinking. This is possible because TSI seeks to coordinate the use of different systemic approaches, hence being capable of taking advantage of their strengths.

Critical awareness refers to the close examination of "the assumptions and values entering into actually existing systems designs or any proposals for a systems design", and to the understanding of "the strengths and weaknesses and the theoretical underpinnings of available systems methods, techniques, and methodologies" (Jackson, 1991, p.185). The first form of critical awareness refers to the design of social systems, and it is promoted mainly by the inclusion of CSH among the systems methodologies it deals with; however, it can be argued that the use of certain metaphors in the creativity phase of TSI, like the *political* metaphor, is also enabling the participants to carry out this critical analysis of the problem situation. The second form of critical awareness is more explicitly addressed by TSI, in that it provides a critical examination of different systems paradigms and methodologies, on the basis of which their assumptions and strengths and weaknesses would be revealed. Nevertheless it should be noticed that in

this case what one is to be aware of is already given by the analyses carried out by academics, which are provided in the literature—like those in Jackson (1991 and 2000), and Flood and Jackson (1991)—while in the first form of critical awareness the analysis is carried out by the methodology users, using the tools provided. There is, however, one sense in which what I have just said is not totally accurate. Jackson has remarked that TSI can also be a vehicle for research, for investigating the links between tools and methodologies, and between methodologies and theories (2000, pp.389-390). This would effectively be an improvement of the methodology user's critical awareness. In my opinion, however, it is not really clear who the beneficiaries are in any given situation.

Social—or sociological—awareness refers to the acknowledgement of the political and historical contingency of the development and use of different systems methodologies that have been developed: It "recognises that there are organisational and societal pressures which have led to certain systems methodologies being popular for guiding interventions at particular times" (Flood and Jackson, 1991, p.48). However, this acknowledgement seems to still be lacking in the methodology presented in 2000, although some independent efforts have been made in this direction (see for instance Flood, 1990; and Oliga, 1988). A second form of sociological awareness is mentioned, which helps see the sometimes deleterious consequences of using certain approaches in certain situations. It is mentioned as an example the use of soft systems thinking, which presumes open and free debate, in situations where power is manifested in coercion, which could produce as a result the further imposition of the will of the powerful but with a false appearance of consensus (see Jackson, 1991, p.185). This type of social awareness, however, is very closely related to critical awareness.

The next commitment in Jackson (2000) is to *human improvement*, which is broader than the commitment to *human emancipation* suggested originally, with the clarification that the most it can aspire to is being local, rather than universal (see Flood and Romm, 1996; Midgley, 1996; and Jackson, 2000). Human improvement would be the "bringing about [of] those circumstances in which all individuals could realize their potential" (Jackson, 2000, p.376).

The last commitment is to *pluralism*. The adoption of this pluralist position implies that

TSI promotes the development of the various systems methodologies, and the use of the tools created within them. In fact, this is very clear in the methodology, and is said to constitute one of the greatest strengths of TSI and in general of what has come to be called *multimethodology*. Again, it represents a refinement of the original commitment to *complementarism*: The pluralist position, contrary to the complementarist one, acknowledges the fact that the various systems paradigms and methodologies may not tidily and unproblematically complement each other, and that therefore some degree of contradiction both within and between them should be learnt to live with. Tsoukas's (1993) and Gregory's (1996) criticisms of earlier versions of TSI can be said to have helped trigger this change.

3.4.4 Knowledge Imposition in TSI

Criticality and the Prevention of Knowledge Imposition

Given the meta-methodological character of TSI, there are two levels at which its capacity to prevent knowledge imposition can be discussed. Firstly, at the level of views of reality, the power of TSI to prevent knowledge imposition directly depends on that of the various systems paradigms and methodologies examined or constructed²⁶ by it. I will not discuss this further, given that this has already been done in respect of CSH, Interpretive Systemology, and Team Syntegrity. At the level of views of the systems approaches and methodologies I do want to comment on two main aspects of criticality. The first one of them has already been mentioned when I explained the commitment to critical awareness. Its important effect on knowledge imposition consists in the fact that if various alternative paradigms and tools to critique them are provided by TSI, apart from helping avoid the possible harmful consequences of the use of certain methodologies in certain situations mentioned in the previous section (3.4.3), it also helps prevent the uncritical acceptance of particular individual paradigms or methodologies. Therefore, it prevents the imposition of the forms of knowledge

²⁶ Constructed, in the sense that the generic systems methodologies are a theoretical construction in TSI.

entailed by each specific systemic paradigm or methodology.

The second aspect is related to the way in which this critique is carried out. In previous versions of TSI, the source of critical questions was taken to be Habermas' theory of knowledge-constitutive interests. This meta-paradigmatic character received some criticisms (see for instance Tsoukas, 1993), which effectively triggered changes in the methodology. Nowadays, it is argued that critique should be carried out *between* the paradigms, rather than from *above* them (see Jackson, 1999 and 2000). It is important for my purposes here to notice that this new approach, if effectively put in practice, would avoid the risk of having to impose the knowledge entailed by the meta-theory used, and with it its assessment of the paradigms and methodologies. If critique takes place between the paradigms, then no one could be imposed because every one of them will be at one point subjected to critique. (In the other case, the meta-theory was never subjected to critique.)

Criticisms Related to Knowledge Imposition

I will concentrate here on two points which, even if not too clearly related to knowledge imposition at first sight, may have important consequences for it. To explain the first one of them, let me start by quoting a criticism made by Ulrich (2000) about Flood's and Jackson's interpretation of his CSH, and particularly about the idea that coercion, as "embedded structurally in organisations and society (giving rise to the more subtle and complex exercise of power), cannot be addressed using Ulrich's approach" (Flood and Jackson, 1991, p.217). Ulrich comments that that position

tacitly conceives of emancipation as a one-shot exercise, a singular event that must take place within the given discourse situation, according to the motto: *emancipation here and now!*

(....) What I think is missing in the picture is the crucial role of people as *citizens*. As citizens, people take part not merely in one particular discourse situation, for instance at their place of work where some systems practitioner may have a mandate to intervene, but also in many other

discourses, whether within the organisation at issue or in other organisations, or in their private environment, or in the *public sphere*. What matters is whether they can use these many chances to voice their concerns effectively. If we disregard this larger environment, our concept of emancipatory systems practice is bound to be too narrow. (Ulrich, 2000, p.8)

This effectively constitutes, along with criticisms by other authors (see for instance Midgley, 2000), a disagreement concerning how CSH and more generally the practice of boundary critique should be considered. These and other related disagreements about the nature or consequences of the various systems paradigms suggest that the results of the interparadigmatic critique proposed by Jackson (1999) is not uncontroversial. Disagreements can occur both because of differences in interpretation of the paradigms, and because of differences on what a critique by one particular paradigm on another one would be. But if the interpretation of a paradigm and the critique made on it from another one are not uncontroversial, then they can be imposed if made to be accepted uncritically. In the case of Jackson's TSI (2000), the interpretation of the paradigms is perhaps most visible in, but not exclusively or exhaustively represented by, the constitutive rules defining the generic paradigms.

Although perhaps not in a direct way, this criticism may have something to do with another one raised by Tsoukas (1993) concerning the meta-theory that earlier versions of TSI employed (see Jackson, 1991; and Flood and Jackson, 1991). Tsoukas suggests that each systems perspective considered—i.e, functionalist, interpretive, etc.—is a reality-shaping paradigm in its own right, and that an interpretation of them which assigns them to specific problem contexts would simply be wrong. As mentioned before, Habermas' theory of the knowledge-constitutive human interests was used as such a meta-theory, but it was later abandoned. For the purposes of examining knowledge-imposition in particular, Tsoukas' criticism can be rephrased emphasising the fact that TSI provides a particular interpretation of the systems paradigms. That interpretation corresponds to a particular view that may be in conflict with the view proposed by the proponents of the reality-shaping paradigms themselves.

The second point in relation to knowledge imposition is a quite different one.

Fuenmayor has argued that a central concern of interpretive and critical systems thinking is that of accommodation of viewpoints, in order to resolve or dissolve conflicts between them so that action can follow. According to him, "accommodation is (...) a conservative call for accommodating everybody into a given order so that the stability of such an order is maintained" (Fuenmayor, 1997, p.244, italic and bold fonts in the original). In trying to do that, these approaches would not be radical enough so as to question the present epochal order, and would thus still be trapped inside it. The criticism is explicitly addressed at the thought of Checkland, Ulrich, Flood, and Jackson, and therefore could also apply to boundary critique (see subchapter 3.1). Now, what could this mean for knowledge imposition? Fuenmayor's criticism suggests that there is something that is not questioned by these approaches, and that therefore we are still trapped in it. By not realising that we are in that trap²⁷, it can be thought of as having already been imposed on us. More generally, it implies that there can be forms of knowledge lying beyond the interpretations of the various systems paradigms provided by TSI. As they are not identified, they cannot be questioned and their imposition cannot be prevented.

3.5 SUMMARY OF THE ARGUMENTS REGARDING KNOWLEDGE IMPOSITION

Just like in the previous chapter, as a final subchapter I will now present a summary of the findings that concern the problem of knowledge imposition, about the systemic approaches with a critical intent reviewed here.

The first one is Critical Systems Heuristics and boundary critique. Starting from the idea that knowing is necessarily a partial act in which the knower selects some aspects out of the multiplicity of her/his experience of reality—effectively drawing a system boundary that includes those aspects and excludes the rest—the approach seeks to provide laypersons with appropriate tools to question the partiality of any form of

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²⁷ The metaphor is that of the lobster trap, which Fuenmayor takes from Vickers (Vickers, 1970).

knowledge that corresponds to a social system design. The purpose of this is, at least partly, to allow them to not accept uncritically the views and systems designs presented by experts—and hence to not let those views be imposed on them. The main addressees, if an approach similar to this one were to be used in a pedagogical context, would be the students, for it is them who would become empowered by learning those critical tools. Now, CSH and boundary critique have been criticised for assuming that the determination of the oppressive nature of situations is unproblematic, and for not realising that it itself can become a vehicle of knowledge imposition by those who use it and then impose their own interpretation of their and others' points of view. This last point refers to the fact that the critical examination of points of view—produced by means of the use of the tools provided by CSH or boundary critique—is itself an interpretation that may be influenced by the interpreter's own points of view.

Another approach reviewed was Interpretive Systemology. It seeks to provide a way in which weltanschauungen can be identified, studied, and questioned, so that various aspects of their meaning become visible. By using ideas from a Husserlian and Heideggerian phenomenology to understand the human act of knowing, it actually incorporates systems thinking by means of an argument which is similar to the Kantian one espoused by Ulrich with his idea of system boundary. The methodology proposed by Interpretive Systemology, however, still allows for a comparison between on the one hand the various interpretations formulated from different weltanschauungen, and on the other hand the phenomena being studied; and, furthermore, it also allows for the selection of one such interpretation as that which seems to fit the phenomena in a better way! Now, leaving the possibility open that there can be a particular interpretation which better fits the phenomena, implies that there can be some kind of ideological expertise which can privilege, and impose, particular weltanschauungen. And, similarly to the case of boundary critique, there is the question of whether the interpretations implicit in the analyses of weltanschauungen carry with them a particular worldview that can then be imposed.

The third approach examined in this chapter was Beer's Team Syntegrity. It consists of a protocol that organises the interactions between a number of people—usually 30 or so—who are engaged in some process of knowledge construction. The protocol attempts to maximise the chances of all participants, to talk and to be listened to. It

actually produces symmetry in the conversation, while creating a network of interchange of ideas. This symmetry constitutes, precisely, an attempt to prevent particular voice from dominating over the others, and thus to ensure that the conversation will not be a hierarchical and imposing one. The main addressees, in a pedagogical context, would be the teachers, or those who can influence the design of the classroom interactions. Indeed, the approach has already been used by a teacher for such a purpose (Espinosa, 2000). The main criticism to Team Syntegrity that I pointed out as regards knowledge imposition, is very similar to that made by Duhan Kaplan about work in the Critical Thinking Movement (see section 2.1.2): As the approach does not seem suitable to help identify subtle or altogether hidden messages contained in forms of knowledge, it therefore cannot prevent their imposition.

Finally, the last approach considered here was TSI and critical pluralism. Starting from the idea that systems paradigms are incommensurable but all have something to offer, it seeks to develop a framework in which the techniques, methods, and methodologies developed in all of them can be used in a critically reflective way. For that purpose proponents of TSI analyse them in terms of their assumptions, strengths, weaknesses, and likely consequences of their implementation. This should then serve as an input for a reflection that should take place when intervening in particular problem situations. The general strategy for tackling knowledge imposition that is offered by TSI consists in the presentation, with a critical analysis, of the various alternative possibilities existing in a particular domain—which correspond, in this particular case, to systems paradigms within the realm of problem solving. Two criticisms concerning knowledge imposition were examined: The first one represents the fact that the interpretation given by TSI of the systems paradigms may be different from that of others, including the proponents of those systems paradigms themselves. And the second criticism suggests that there can still be aspects that may be implicit in the systems paradigms, that may escape the analysis made in TSI, and whose imposition is therefore not prevented.

PART II

4. THE PROBLEM OF KNOWLEDGE IMPOSITION

Mostly but not exclusively based on the findings from the two chapters in part I, in part II I will try to integrate the results found there which are relevant to the problem of knowledge imposition, and to delineate the issues involved in a much clearer way.

In the present chapter I will examine various aspects that to some extent define the issues of autonomy of thinking and knowledge imposition, in relation to criticality. The very idea of knowledge imposition seems to have been understood differently by the various critical approaches reviewed in chapters 2 and 3, and this exploration should reveal some of their similarities and differences. This chapter, then, should serve to clarify what it is that I will be talking about, as well as providing a preliminary generic description of the ways in which the problem of knowledge imposition appears in the various critical approaches studied here. This should prepare the way for a more thorough and detailed analysis to come in chapter 5.

In subchapter 4.1 I will explore some basic elements of the notion of knowledge imposition; namely, the relation that it establishes between persons—upon whom knowledge may or may not be imposed—and forms of knowledge—which may or may not be imposed on persons. Subchapter 4.2 will present a general formulation of the types of strategies used by the critical approaches reviewed in chapters 2 and 3. In subchapter 4.3 I will complement that analysis by examining what constitutes the object of inquiry for the various theories constructed by those critical approaches. Subchapter 4.4 examines the relations between the objects of inquiry of criticality, and the strategies for tackling knowledge imposition found. Finally, subchapter 4.5 provides a summary of the argument.

4.1 KNOWLEDGE IMPOSITION, PERSONS, AND FORMS OF KNOWLEDGE

As should be clear from the previous chapters, knowledge imposition does not appear in a totally uniform and consistent way in the various critical approaches reviewed. However, it can be said that in all of them it immediately establishes a relation between a person and a form of knowledge. If it has occurred, then it is said that that form of knowledge has been imposed on that person. Of course, many more elements may be related to knowledge imposition: for instance, a context in which the imposition takes place, other persons who impose that form of knowledge, or who originally constructed it, etc. However, these two—a person and a form of knowledge—seem less controvertibly necessary for knowledge imposition. For one thing, the invisibility in some cases of the person or group constructing and/or imposing the knowledge, as in the case of general cultural forms of knowledge that are only felt as being in the air, at the level of "it is said", does not diminish the relevance of those cases.

4.1.1 Imposition of Knowledge and Imposition of Actions

Knowledge is taken here as knowledge known by somebody—or believed by somebody²⁸—and this in turn suggests a distinction with other forms of imposition, like *imposition of actions*. In the case of knowledge imposition the person upon whom knowledge is imposed comes to accept that form knowledge as true, or valid, and may then probably start voluntarily acting by its rules. This way, for example, Galileo's case in front of the tribunal of the Inquisition, in which he was forced to say something he did not believe in, does not belong to the category of knowledge imposition. As far as we know, he never came to accept it, to hold it valid, and therefore he never adopted that form of knowledge: "And yet it moves!" Moreover, perhaps it can be said that for

the inquisitors the ideal situation would have been to impose that knowledge on him: He would have become an ally instead of a danger. In a different sense, we might also say that knowledge was attempted to be imposed on the rest of Europe, by the very act of trying to prevent Galileo's ideas from reaching them... But it was too late, as the historians have been able to show, given that his books had already been published and the damage had already been done. The forceful procedure that made Galileo say that the earth stands still at the centre of the universe was masked in at least two senses: Firstly, Galileo's ideas were supposed not to reach the rest of Europe; and secondly, it was to appear as an act of repentance instead of an imposition of actions. But both of these cases are about making the rest of Europe believe in a doctrine strongly supported by the Church, and not really Galileo himself. He still had to be watched over, so that he would not continue with his subversive work, and would instead restrict himself to a less harmful one. In this example, force was used for making Galileo say certain things instead of others, and for making him not to keep working and inquiring on the issues he had raised. But he was not made to believe certain things, or to accept them as true or valid; only to say so.

This does not mean that these two forms of imposition can always be separated easily, or that the existence of a relation between them can be denied. Knowledge imposition can even be considered for some purposes as a special case of imposition of actions, one in which it takes place in a much subtler way than usual, and one in which the person upon whom knowledge is imposed may not realise that the imposition is happening. For example, imposition of actions may reflect knowledge imposition at a different level, as in the case of the pedagogical knowledge which is enacted, even if in most cases not discussed, in educational centres. What may be imposed here is not the knowledge that is talked about in the classroom—the *subject contents*—but one about education, classrooms, teachers, students, and their roles; that is, about pedagogy. A teacher, or a student, may come to accept as valid certain definitions of education, of roles, etc., without even having formulated the questions to which those definitions are answers.

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²⁸ The reader may have already noticed that I have *not* been using the word *knowledge*, and the expression *form of knowledge*, as the traditional "justified true belief". Indeed, throughout this document I will not be using it with that sense. I will take forms of knowledge as more or less consistent and coherent sets of

4.1.2 Knowledge Imposition and the Non-Involvement of Reflection

According to the discussion in the previous section, knowledge imposition requires that someone come to believe a form of knowledge true, and not necessarily that s/he be told to believe it is. This makes the relationship between knowledge and beliefs, at least as used here, even stronger. Moreover, this also suggests that imposition could occur without necessarily someone intentionally trying to manipulate someone else. Even in a case like this the blind acceptance of some form of knowledge constitutes at the same time a limitation to that person's autonomy of thinking. That is, knowledge imposition does not happen in the intentionality of the one who provides the form of knowledge which is imposed.

Now, if in knowledge imposition someone comes to adopt a certain form of knowledge and accept it as valid, then it must be associated to specific kinds of ways in which it becomes accepted and adopted. This would distinguish it from other processes in which knowledge is, for example, constructed autonomously. For the moment I will not enter the debate about whether it is really possible to have autonomous construction of knowledge, or any autonomy at all; although I will make some comments in the concluding chapter. But even if it is not possible to have totally autonomously constructed knowledge, there must be, at least in particular cases, at least some aspects which can be pointed out as not having been imposed so that the prevention of knowledge imposition and the development of intellectual autonomy can be considered relevant questions. One possible candidate for a mark for a form of knowledge having been adopted by someone without imposition, is her/his reflective and questioning engagement with that form of knowledge. That formulation seems to agree with McPeck's comment (1981, p.157): "It is all too common, however, for specific subjectoriented courses to permit information and authority to rule in the place of reason, and where authority reigns unreflective obedience will follow." And also with Young's use of Habermas' distinction

sentences which are believed true by someone.

between, on the one hand, co-ordination of human action through, say, increased agreement (...) reached through communicative understanding, and [on the other hand] agreement reached through the coercion of minor psychological distortions, fear, rewards and punishments, or factors other than assent to reasons or grounds. (1990, p.103)

Let me keep this preliminary formulation, which can be refined or re-examined later if necessary.

When there is no such reflective and questioning engagement with an adopted form of knowledge, that adoption could then be attributed entirely to other forces. The depiction of these forces tends to vary from approach to approach, perhaps more in emphasis than representing real disagreement. A more important difference is perhaps the role given to those forces: In approaches with a political tendency, like critical pedagogy or in some cases critical theory in education, they are clearly political and therefore constitute in themselves a form of justification for the whole project of critique as a moral project. In other approaches, like the one adopted by the critical thinking movement, what seems to be important for justification of critique is that there might be forces other than reason, regardless of what those forces are²⁹.

There is one point that is crucially important to clarify. The emphasis when dealing with the problem of knowledge imposition is put on the process of coming to accept or reject the partial or total validity of the piece of knowledge in question, and not so much or at least not only on that validity itself. That is, it is accepted that even if a piece of knowledge is known to be valid by the teacher, it may be imposed on the students if the process of accepting it does not come about in a desirable way in which students have the possibility of properly questioning that validity; that is, because of good/right causes or reasons. Therefore, the validity of a certain piece of knowledge as known by the teacher does not guarantee that knowledge imposition will not occur.

²⁹ Let us notice that whereas much of the rhetoric of critical systems heuristics takes a moral stance, the ultimate justificatory analysis seems to be based on epistemological grounds (see subchapter 3.1). In the case of the critical thinking movement, it looks as if a political emphasis were badly regarded, as I take it from Paul's apparently defensive position taken in his clarifying remarks about the political examples he uses in his papers not meaning that his approach is a political one (Paul, 1994).

This is a distinction between making sure that the knowledge students acquire is valid, and making sure that the process by which students question the validity of any knowledge presented to them—either by their teachers or in the world outside of the classroom—is good/right. It becomes manifest in McPeck's quote above, about the difference between teaching based on information and teaching based on critical thinking. Also in Paul's claim that what it is to be a critical thinker cannot be defined in terms of what views, or beliefs, a particular person holds, but in terms of how s/he holds them—more critically and self-reflectively, or more uncritically. He argues in this respect that "no matter what views one might possibly adopt, there is always an independent question to be raised as to the manner in which one comes to hold those views" (p.197, my italics). And also in Siegel's remarks about the inevitability that young children learn in uncritical ways, even if it is valid knowledge, and about the need to later redeem those teachings that have been indoctrinated by providing good reasons for them, when they are old enough to understand them and be critical (Siegel, 1996). The distinction therefore represents a turn from the idea of knowing to that of reasoning, and it is a manifestation of a shift from emphasis on end results of educational processes, to the processes themselves. This would be, as some critical approaches would have it, an assumption that seems to run through the field and that gives the idea of knowledge imposition the importance it is attributed here. It is not an assumption in a strict sense, given that there is a line of reasoning behind it that shows that it has not been adopted without being given consideration.

4.2 THEORIES OF THE CRITICAL AND OBJECTS OF INQUIRY FOR CRITICALITY

With respect to what matters for this project, critical approaches provide a set of questions to be asked by someone—the critical person. Those questions can sometimes prevent knowledge imposition by the mere act of asking them and trying to provide an answer to them, as when the critical person now recognises the existence of alternatives s/he had not envisaged before. But those questions can also serve as a diagnostic tool

that helps detect cases of knowledge imposition. In this latter case an additional intervening action would be required if the imposition is to be prevented. Let me call those questions *sources of criticality*, to acknowledge the fact that it is the attempt to answer them which will produce critical knowledge about whatever is the case. Now, the relevance, effectiveness, and power of these questions is described and justified by the theorisation proper to each of the critical approaches which promote asking them. That is, the sources of criticality acquire their usefulness and meaningfulness from some knowledge of what is critical, and in some cases also of its relation to knowledge imposition. This knowledge is expressed in what I called in the introduction *theories of the critical*, which are sets of propositions and concepts that provide just that description and justification³⁰.

A theory of the critical has as its object of inquiry criticality, or the critical. However, the sources of criticality make use of it to study something else, which constitutes their own object of inquiry or what the critical person will be critical about. Importantly, in most of the approaches reviewed it has been taken to be some kind of forms of knowledge, or something directly related to them: discourses, theories, ways of knowing, worldviews, arguments, processes of production of knowledge, etc. Or at least something which can be seen as the representation or expression of some form of knowledge and is therefore social because linguistic: social practices, social reality, social systems, etc. This places theories of the critical on a very special position, because they constitute and can be used to produce knowledge about forms of knowledge. If the domain of some form of knowledge—what it is about—is some part of reality and in that sense it is a reading of reality, then the domain of the critical knowledge constructed out of the sources of criticality, is a reading of a reading of reality. Now, a reading of reality is a form of knowledge, and a form of knowledge is always a reading of reality. Nevertheless, this terminology of readings of reality and readings of readings of reality is somehow more practical for some purposes than that of forms of knowledge, because it allows to quickly distinguish between the two levels on which they may lie. I will use it with some frequency throughout this document, especially whenever that distinction is particularly relevant.

³⁰ The word *theory* does not intend to have any connotation beyond that of a more or less coherent and consistent system of propositions that say something about some domain. As such, I am not making any distinction between theoretical and observational, practical, normative, axiomatic, or whatever types of

In what follows I will now briefly describe the objects of inquiry established by the various critical approaches here reviewed. To do this, I will make use of the distinction/ relation between forms of knowledge and persons, which at the beginning of this chapter I deemed central to knowledge imposition. As already mentioned, criticality is to a great extent about forms of knowledge. A form of knowledge, however, only makes itself present in the form of its content, or what it means; in other words, a form of knowledge *is* its content. Of course, I am using the word *content* in a very wide sense, covering everything about meaning that is somehow conveyed or carried by the words used. A critical approach that emphasises forms of knowledge will therefore be *focused on contents*.

This is not the only option, though, given that a critical approach can also study the persons who create or make public those forms of knowledge, and particularly the interactions between various persons in processes of knowledge production and/or reproduction. In this case it can be said to be *focused on interactions*. Some approaches will actually study both, or the relation between them, in which case I would simply say that they are *focused on the relation between forms of knowledge and interactions*.

The distinction between an inquiry into *content* and an inquiry into *interactions* is not original of the present study, but has been considered in the past in different guises and different contexts of argumentation. For example, Giroux (1980a and 1980b) has made a similar distinction between content-based and strategy-based critical approaches, which he regards useful for classifying most of the critical work in education before the 1980s. Now, by presenting these categories I do not claim that they define all that there can possibly be for criticality. They are simply descriptive of a particular aspect in critical approaches, and do not intend to portray something like the essential element which determines all that can be said about criticality. Furthermore, these categories do not attempt to have the capacity for classifying all the possible critical approaches that have existed or will ever exist.

statements. The domain in this case is criticality itself, or the critical.

4.2.1 Preliminary Comments on the Relation Between Forms of Knowledge and Persons

It is of course undeniable that, as concerns the problem of knowledge imposition, there are important relations between forms of knowledge and persons, and a fortiori between forms of knowledge and interactions between persons. One clear example appears through the notion of *interest*, as used by critical pedagogy: If people from certain social groups are able to dominate the interactions with others and make their voices heard while silencing the others', then it is likely that the forms of knowledge which will prevail and become public will be those whose acceptance favours their interests. Along a similar line of argumentation, it can be said—and has been said by critical, feminist, and post-radical, pedagogues—that the *situatedness* of the knowing subject directly influences the forms of knowledge s/he will hold, such that her/his knowledge also becomes situated. This way, forms of knowledge are related to particular persons, the positions they occupy in the social network, and the interests proper to those positions.

The relation here, however, does not guarantee a perfect and predictable match, as the relations are perhaps not deterministic. Or, in other words, this apparent reduction of forms of knowledge to persons—or, more specifically, to social locations or positions occupied by those persons—and vice versa, can never be complete, and there will always be a remainder which cannot be accounted for in either reduction. There are various reasons why this is so: Firstly, it cannot be exhaustively known in advance what kind of beliefs a person holds, regardless of the amount of information one has about her/his social location, history, etc. There is always some uncertainty regarding a person's reading of reality, and it is only some form of interactions or engagement with her/him, which gives an idealistic hope of getting to know it. Secondly, one and the same person can hold, to some extent simultaneously, a number of contradictory readings of reality or belief systems. It is somehow inconceivable for them to be too obviously and consistently contradictory (see Davidson, 1998), but nevertheless sometimes those contradictions can be recognised, and may even be acknowledged by the person her/himself. Thirdly, a form of knowledge can be constructed or examined

on its own, and some of its implications and logic analysed, without attributing it to a person.

4.2.2 Forms of Knowledge

Perhaps for the majority of the approaches reviewed, the object of inquiry of the sources of criticality turns out to be some kind of forms of knowledge. There are variations between them, of course, in terms of what specific kinds of forms of knowledge are studied and what characteristics they can be attributed with.

In the case of the critical thinking movement, for instance, the theory of the critical may correspond to a theory of rationality, or an epistemology, or a theory of argumentation. The object of critical inquiry is usually an argument, which in turn is as a minimum a claim or conclusion together with some reasons adduced in its support. There are variations, however, as is evidenced in Paul's discussion about why the object of inquiry should be something of a wider scope, such as a worldview (Paul, 1992a). In any case, they are forms of knowledge expressed in sentences or sets of them. Let us also recall that one dimension of Paulo Freire's approach is constituted by the conscientisation and critical consciousness elements, which are at least partly defined in terms of forms of knowledge. A naïve consciousness, for instance, is one which holds certain beliefs about reality and about the person's role in it, and critical consciousness similarly defines an opposed kind of knowledge of reality. Something similar occurs with other approaches in critical pedagogy, as when it is said that critique should reveal the gaps and fissures in the [usually dominant] discourses, or when it attempts to make public the discourses that have been silenced or repressed so far. To reveal those gaps or repressed alternatives, they have to ask questions of those [dominant] discourses and thus constitute it as the object of inquiry. In the case of boundary critique, it is a form of knowledge expressed [normally] in designs of social systems, as the sources of criticality provide questions for describing and redefining the boundaries drawn by those designs. There are questions to be asked about those designs, so that later they are compared to other alternatives provided by the critical person or by others. Something similar occurs with Interpretive Systemology, but in that case it is not only a form of knowledge which is questioned, but also what is taken to underlie it and give it meaning, which is referred to as *context of meaning*. For critical systemic pluralism the object of inquiry is the various systems paradigms that have been developed, and these paradigms are specific kinds of forms of knowledge.

Now, in some of these approaches the object of inquiry is not constituted only by a form of knowledge, but also by its connection with something else like interests of social groups, and power formations. In any case, however, it is important to notice that a form of knowledge only exists as an object, in its content. Because of this, it only comes to exist in the act of interpretation, or the act in which its meaning is revealed. In this sense, these critical approaches necessarily either start with, or presuppose, the interpretation of the form of knowledge being critiqued.

4.2.3 Interactions

For a few approaches the object of critical inquiry is the process of production of knowledge, but more specifically the interactions between persons or groups of persons in which knowledge is produced (e.g., social groups). This assumes a meeting of different people who share some *space of interactions*, in which some inquiry or learning take place. This space of interactions, when the issue is education and pedagogy, has most typically been taken as the conversations that occur in the classroom by the various means available. The idea, however, can be broadened much to include all sorts of situations in which some form of production or reproduction of culture and/or knowledge takes place (as can be seen in Luke, 1996). It might also be argued that the public sphere in general is such a space.

Among the approaches from chapters 2 and 3, the dialecticians' and pragmadialecticians' provide a description of discussions in terms of the possible moves by the protagonist and the antagonist, as well as a set of rules that must be fulfilled if the discussion is to be a critical one—which, as argued in section 2.1, has a bearing on knowledge imposition. Discussions in that approach represent a generic type of conversational interactions between persons, in which knowledge is produced, reproduced, and/or modified. In Freire's pedagogical analysis, a focus on interactions appears in at least two senses: One of them refers to the classroom activities and the relation that is established between teacher and students. His idea of a dialogical problem-posing education is a description of an ideal kind of education, expressed in terms of the interactions between the participants in the pedagogical act. The second sense corresponds to an analysis of interactions outside of the classroom, at a wider societal level, in which public knowledge is produced by the oppressors or dominant groups in power, and imposed on the oppressed. Freire's theorisation on the domesticating characteristics of the very condition of oppression is part of this analysis. Something similar can be seen in other critical pedagogy authors, although in more recent analyses the examination of public knowledge production is carried out taking into account other variables—like gender, race, sex, etc.. In Young's Habermasian approach, it is clearly the interactions between teacher and students in the classroom which the study is to reveal, and no mention of contents is made, except when they are necessary to determine the type of the interactions. The case of Gore's Foucauldian critical proposal is very similar. In systems thinking there has been less interest in this topic, but an important exception is Stafford Beer's Syntegration. As argued in section 3.3, even though it does not explicitly provide questions to ask of situations in order to critically assess them, the design of this method for organising interactions is based on some principles and ideas which could well be used for that purpose. Some aspects of Ulrich's boundary critique can be used to describe and critique aspects of knowledgeproducing interactions, like who is and who is not participating in the debate (see Midgley, 1997). And finally, Jackson's TSI takes into account interactions insofar as some of the approaches it uses and analyses with do deal with interactions.

Importantly, by acknowledging interactions as a central object for critical inquiry, these approaches recognise and directly make use of the social nature of the production and reproduction of knowledge.

4.3 STRATEGIES FOR ADDRESSING THE

PROBLEM OF KNOWLEDGE IMPOSITION

Starting from the idea that knowledge imposition occurs when a particular [usually undesirable] relation is established between a person and a form of knowledge, in this subchapter I intend to examine the ways in which inquiry into the kinds of objects mentioned in subchapter 3.2 can prevent—or be a step in the prevention of—knowledge imposition. That is, I will examine the strategies used by those approaches, in their relation with criticality and more specifically with the kinds of critical inquiry that they promote.

Criticality suggests some kind of critical inquiry, carried out by someone who can be called the *critical person*. There are differences, however, as to the role this critical person plays in the prevention of knowledge imposition. A survey of the approaches reviewed in chapters 2 and 3, and particularly of the sections that examine those approaches' attempts to prevent knowledge imposition shows that two main strategies are used. In one case, by being critical about some form of knowledge, the critical person is actually preventing it from being imposed on her/him. I will say that this strategy addresses the problem of validity, because the validity, or the grounds for acceptance, of a particular form of knowledge is questioned. Criticality is here actively and directly involved in that task, or, more precisely, it constitutes the task itself. In the second case, the critical person examines a particular process of production and/or reproduction of knowledge—for our purposes it is normally classroom or classroomrelated activities—and judges whether in it knowledge imposition is taking place on one or more persons among those participating in it. By doing this, s/he would only be pointing at the imposition, but not yet preventing it from happening. intervention in the situation by her/him or someone else is required for that prevention to occur, and because of this criticality is not the only factor in respect of the development of autonomy of thinking and the prevention of knowledge imposition. In a sense it would be instrumental in achieving non-imposing knowledge-producing interactions. This strategy addresses what I have called the *problem of pedagogy*.

This distinction between the two strategies does not imply that it should be taken as a straight classification of critical approaches. Rather, it is intended as a classification of ways in which knowledge imposition is dealt with. This way, for example, one single approach can make use of and theorise about both pedagogy and validity.

4.3.1 The Problem of Validity

In very general terms, the problem of validity refers to the question of how to get the students, or the people who are to be supported in general, to be able to properly question and/or assess the [lack of] validity of any form of knowledge or reading of reality, before readily accepting it. The central question is what to do in the face of claims to validity by oneself or by others, be they the media, the tradition, the dominant groups in power, the politicians, the texts, the teachers, or whoever is the case. It has to do with one characteristic that can normally be found in most accounts of criticality to a larger or smaller degree: *scepticism*, or the attitude towards forms of knowledge according to which one is to doubt whether it should be accepted, at least until it has been so assessed.

The general idea that connects validity to knowledge imposition is, then, the following: If someone—e.g. a student—becomes competent or skilled in questioning and assessing the validity of whatever knowledge is presented to her/him, and if s/he acquires a disposition to doing that questioning and assessing, then knowledge will not be imposed on her/him and s/he will effectively construct her/his own. Because of this, it can be said that the users of the theory of the critical when the strategy used is via the problem of validity, are the students. It is the students who take the theory of the critical, and use it in an attitude of scepticism to question forms of knowledge.

Most of the proposals of the Critical Thinking Movement tackle the problem of knowledge imposition via the problem of validity. The tools they provide are indeed explicitly about the assessment of the validity of forms of knowledge, and the theories of the critical used are theories of rationality or of argumentation. The idea is that the

assessment of an argument can occur in more rational (or reasonable) or less rational ways, and the tools would help students do it rationally and reasonably. This way, for instance, an assessment might be based on prejudice, or may be incoherent, etc. (see Paul and Adamson, 1987), but it would be the task of critical thinking to make sure that it is not. Dialectical and pragma-dialectical approaches, mentioned also in subchapter 2.1, certainly provide some elements related with validity of forms of knowledge, as is evidenced in the rules for critical discussions that deal with assumptions, as well as in the formulation of fallacies. These could be used by students to question actual forms of knowledge. But the problem of validity is not the only strategy that could be used in dialectical and pragma-dialectical approaches, although it still plays a central role. The same seems to apply to critical pedagogy. In Freire's case, the validity of the dominant views is assessed by the students with help from the questions provided by the teacher. It is once they acquire a critical consciousness that they will be able to do that questioning in a deep and critical way. This is similar in other critical and post-radical pedagogy approaches, although this time not to replace those views with others, but to point at the presumably inevitable partiality and situatedness of all forms of knowledge. These latter approaches sometimes point at the gaps, inherent contradictions, and unjustified—and unjustifiable—assumptions in the forms of knowledge being critiqued; but sometimes they also point at exclusions in the processes in which those forms of knowledge were created. In both cases it is the problem of validity which is addressed. In systems thinking most of the approaches reviewed also deal with the problem of validity: CSH looks into the elements of social systems designs that cannot presumably be justified—and that therefore show a lack of a comprehensive or total validity—so that its users acquire the ability to not accept proposals uncritically, and to argue against them on this basis. The theory underlying TSI points at the limitations of the various systems paradigms and their proposed methodologies, methods, and techniques, and in so doing it is questioning their validity by means of looking at the possible contexts or scenarios in which the application of those tools would be harmful [or appropriate]. Interpretive systemology does something similar when it attempts to show the basic and to some extent arbitrary—context of meaning in which some form of knowledge makes sense. Here it is that arbitrariness which can be used as a critical concept to question the validity of forms of knowledge. Other approaches that point at the historical origins of forms of knowledge can also be said to deal with the problem of validity, if in doing that they are at the same time trying to show that this historicity

suggests some kind of lack of [absolute] validity.

4.3.2 The Problem of Pedagogy

One central question here is about how to describe the classroom and classroom-related interactions between students and teacher, such that knowledge imposition can be either detected or explained. Theories of the critical dealing with the problem of pedagogy have to take care of this. Derived from this theorisation, appears then the question of how to organise those interactions such that knowledge imposition is prevented.

The general idea is that if one voice—for example but not exclusively the teacher's—is allowed to dominate over those of others, then the latter will not be able to develop their voices and may end up adopting the forms of knowledge espoused by the dominating one. This domination does not necessarily have to take place in a visibly forceful way, but may occur much more subtly. Actually, it is perhaps in these latter cases when help from a theory of the critical is most needed. The connection here, however, is not absolutely necessary, given that someone might silently resist the imposition and keep her/his own reading of reality intact. But it certainly seems that the existence of only one available voice will make it look as if there were no more possibilities. Moreover, such configuration of interactions in the classroom and classroom-related activities may produce some implicit additional *beliefs*, if one can call them that way, about where authority lies and about the sources of knowledge, and this kind of knowledge may also end up predisposing the students to uncritically accept what the teacher or other forms of authority say.

When the strategy used is to tackle the problem of pedagogy, the user of the theory of the critical will be someone who can influence the design of the interactions in the classroom. Because of this, the addressees of texts that promote this strategy seem to usually be the teachers. Strictly speaking, this is not the only option, although it certainly is the most obvious one. But one might also think of students who may have a possibility of influencing those classroom interactions in some way from their position.

Among the approaches reviewed in this study, those dealing with the problem of pedagogy are definitely a minority. Dialectical and pragma-dialectical approaches define certain rules for critical discussions which in most cases—though not all—are not directly about the validity of what is said, but about the appropriateness of the Now, although their description of the process is not conversational process. necessarily directly determined by concerns with knowledge imposition and intellectual autonomy, it can be argued that if those rules are followed then neither party will impose its proposed knowledge on the other (see subchapter 2.1). Critical pedagogy approaches, including Freire's, propose forms of dialogue in which the teacher does not impose her/his knowledge on the students, regardless of whether s/he is theoretically correct. Interestingly, although that dialogical and non-imposing process is postulated, it is not really theorised or examined in a thorough and critical way. Other approaches like Young's and Gore's directly tackle the problem of pedagogy: The Habermasian conceptualisation of discourse and of the ideal speech situation that Young uses is one in which there should be no knowledge imposition. And Gore's Foucauldian notion of normalisation point at subtle and tacit ways in which power is exercised at the micro level such that the students become docile and forms of knowledge are accepted and internalised by them as if they were *natural*. In systems thinking, methods such as Syntegration attempt to organise the interactions between the participants in conversation, such that it is prevented that only one voice will dominate over the others. To a lesser extent, some aspects of CSH can also be understood as being about organising the debate such that some participants—the laypersons—do not simply accept what others—the experts—say, on the wrong grounds of authority. Here I am referring to more implicit ideas like the suggestion that the laypersons should participate in such debate and be given the opportunity to formulate their own alternative proposals to those of the experts. This is, however, a minimum requirement, and the problem of pedagogy does not really appear beyond this.

4.4 RELATIONS BETWEEN STRATEGIES AND OBJECTS OF INQUIRY

In the previous two subchapters I have described the objects of inquiry found in the critical approaches reviewed in chapters 2 and 3, and the strategies they use to prevent the imposition of knowledge. There is clearly a connection between these two analyses, and that is what I intend to show in this final subchapter. The result of establishing this relation will produce a classification of ideal-types of approaches which will be more useful for the argument to come in chapter 5, which focuses on their capabilities and requirements for addressing knowledge imposition.

I will start by saying that questioning the validity of a form of knowledge is the same as questioning the validity of its content, understood in a broad sense. Let me clarify this, given the existence of proposals such as Habermas' (see for instance Young, 1990; and Romm and Gregory, 2001), and that of critical pedagogues (see Giroux, 1994a; Duhan Kaplan, 1991; and Burbules and Berk, 1999) which suggest that in the consideration of the validity of a form of knowledge the very act of advancing it should also be taken into account. For instance, even if one is willing to accept that a particular claim or form of knowledge is true, one might at the same time reject the timing of its being made public, for the consequences it may bring about, or for the apparent but perhaps misleading entailment of other non-acceptable claims. Nevertheless, in all these cases the content of the form of knowledge in question, the propositions it entails, so to speak, lie at the very centre of the validity questioning. For it is them which will be related to other beliefs about context, about what is and is not entailed by them, etc. This means that critical approaches tackling knowledge imposition via the problem of validity, will necessarily have to study contents, and therefore they will be an object of critical inquiry for them. It may not be the only one, though, but it has to be present. And a central question for their theories of the critical will be about what gives or guarantees the validity of a reading of reality, or about what may limit or annul it. On the other hand, critical approaches tackling the problem of imposition via the problem of pedagogy will necessarily have to study interactions, as that is what defines pedagogy at least as I have used that expression in this document.

Now, questioning the validity of a form of knowledge implies looking at other elements that may affect it in a direct way-e.g., evidence for or against it, contradiction or coherency either internal or with other accepted forms of knowledge, etc.—or that at least affect its securement as prevalent over its alternatives. These other elements may include other forms of knowledge, in which case the connections with the original one are of a logical nature. But they may also include elements of knowledge-producing interactions. The connections in this case are established differently, and may involve issues like whether persons from specific groups in society have been excluded from the conversational processes, thus failing to contribute with their relevant knowledge. An important difference with the interactions that concern the problem of pedagogy is that whereas these are limited to those that constitute the classroom and classroom related activities—or, as it may be called, the *immediate space of interactions*—the interactions that may matter for the problem of validity only depend on the particular processes in which the form of knowledge being questioned was produced, and these may lie out of the limits of time and place of the classroom. That is, these may lie in non-immediate spaces of interactions. This distinction between spaces is one between the here and now of the pedagogical relations and the larger societal spaces of interaction that surround the classroom. A second difference consists in the fact that the characterisation of interactions provided by a critical approach addressing the problem of validity does not need to account for knowledge imposition, and instead must focus on validity. These are, of course, related, in that the existence of knowledge imposition may be in many cases a reason for suspecting that possible relevant ideas affecting the validity of a form of knowledge may have been suppressed, or simply not allowed to have been made public. But the point is that the connection is not necessary, and because of that, talk of interactions in terms of imposition cannot be reduced to talk of interactions in terms of validity, and vice versa.

The problem of validity, then, inquires into readings of reality in their relation with other readings of reality. However, it can also examine them in their relation with interactions, either in immediate or in non-immediate spaces of interactions. The problem of pedagogy, instead, only focuses on interactions in immediate spaces.

4.5 SUMMARY OF THE ARGUMENT

In this chapter I have tried to delineate some of the issues related to knowledge imposition that will be involved in the discussions to come in the following chapters. The first point refers to the elements that constitute a minimal unit for talking about knowledge imposition: These are a person, and a form of knowledge. Their necessity and sufficiency become apparent in the fact that when knowledge imposition occurs, it is a form of knowledge that has been imposed on someone. Now, imposition would be characterised by a particular way in which a form of knowledge comes to be adopted by that person. In particular, it is a way in which a questioning of its validity or appropriateness does not take place.

Now, in order to characterise cases of knowledge imposition, and perhaps to prevent it, the critical approaches reviewed in chapters 2 and 3 construct theories of the critical, from which some sources of criticality or critical questions are produced. The theories of the critical used by those approaches were found to deal with two types of objects of inquiry: *forms of knowledge*, and *interactions between persons*. In fact, each one of them is related to one of the basic elements of knowledge imposition, namely forms of knowledge and persons. The possible interactions that can be studied by a critical approach may be those taking place in the classroom—or what was called the *immediate space of interactions*—or in knowledge-construction processes outside of its boundaries—or what was called the *non-immediate space of interactions*.

Additionally, the strategies used by critical approaches to study knowledge imposition were also found to be of two kinds: via the *problem of validity*, and via the *problem of pedagogy*. The strategy associated with problem of validity attempts to provide students with tools with which they should be able to question the validity—understood in a broad sense—of forms of knowledge. This questioning would guarantee that those forms of knowledge will not be accepted unquestioningly, and therefore that they will not be imposed. The strategy associated to the problem of pedagogy seeks to understand classroom processes in terms of the interactions that take place there, to see if knowledge imposition is produced in them. As a tool for preventing knowledge

imposition, it can help identify instances of it, explain why it was produced, and redesign those classroom processes. Lastly, the relation between objects of inquiry and strategies for tackling knowledge imposition was expressed by saying that the problem of validity inquires into forms of knowledge in their relation with other forms of knowledge, but it can also study them in relation with interactions in which they were produced. The problem of pedagogy, instead, only focuses on interactions in immediate spaces.

5. THE PROBLEMS OF VALIDITY AND PEDAGOGY

Having briefly described in the previous chapter the two strategies found to prevent the imposition of knowledge in the critical approaches reviewed, in this chapter I will examine them in much more detail. The main purpose will be to determine their capacity to prevent the imposition of knowledge, as well as the requirements that appear for them in order to effectively achieve that prevention. This capacity depends on two main questions: Can the approach avoid the imposition of its own favoured forms of knowledge or readings of reality? And can it prevent the imposition of other forms of knowledge or readings of reality? This analysis will prepare the way for the next two chapters, where I will examine whether those requirements are effectively or can potentially be fulfilled. Subchapter 5.1 will be dedicated to the examination of the strategy of addressing the problem of validity as a means to tackle the problem of knowledge imposition. Subchapter 5.2 will follow the same pattern, but this time about the problem of pedagogy. Finally, subchapter 5.3 is a summary of the main argument in this chapter.

5.1 THE PROBLEM OF VALIDITY

In the previous chapter I gave a brief description of what addressing the problem of knowledge imposition via the problem of validity consists in. There are, however, considerable differences between the various approaches in terms of how validity is defined and what specific questions can be used to assess it. Nevertheless, even though I will comment on that, my purpose is not to produce a richly detailed description of

those differences, but instead to concentrate on those aspects that affect the way in which knowledge imposition can be prevented. This way, their inclusion in a single category should be justified by showing a few but relevant common features that allow for powerful insights into imposition. In what follows I will examine in more detail the idea of validity, to then describe the way in which the corresponding strategy to tackle knowledge imposition seems to work. That examination will lead me to postulate the existence of variations in the strategy, due to the use of different kinds of theories of the critical. I will then try to give an answer, for each of those variations, to the question ¿What is needed for an approach with those characteristics to be able to guarantee that there will not be knowledge imposition?

5.1.1 Validity

As argued in the previous chapter, the problem of knowledge imposition in education seems to have more to do with the process by which students get to create or adopt certain forms of knowledge or readings of reality, than with the result of that process—i.e. with which forms of knowledge they adopt. Particularly when dealing with the problem of validity, that process will be described in terms of the validity questioning of forms of knowledge or readings of reality. Now, in spite of all their differences, there seems to be a general pattern in the approaches reviewed, represented in that in all of them it is believed that if no intervention is carried out in knowledge-production or reproduction processes, then they may occur in undesirable ways. In this case, the issue at stake is about whether and how the validity of contents of forms of knowledge is assessed and handled. That description necessarily has to involve a description of contents: of how certain beliefs have been linked to each other, of how certain other beliefs have not been considered, of whether there are possible sources of deception that may not have been recognised, etc. But what, exactly, does each approach deal with when they deal with validity?

For the critical thinking movement, the idea of validity is represented by the notions of argument soundness and justification. The object of study is arguments, which refer at

least to a conclusion and one or more sentences adduced in its support—which play the role of justifying reasons for that conclusion—(see Missimer, 1995b). The soundness of an argument and the strength of its justification would be given, then, by the relations that are established between the conclusion and its reasons, and it is the fields of informal logic and argumentation theory which provide the tools for assessing those relations. Regardless of the various existing proposals for understanding the relation between justification and truth, the idea here is that one should not immediately accept a conclusion that is not well-justified. Now, the tools provided by informal logic and argumentation theory do not refer to concrete contents in particular, and are thus taken to be transdisciplinary. Indeed, no particular contents need to be known in order to learn the tools—although they are so needed in order to apply those tools in particular cases (see McPeck, 1981; and Toulmin, 1958).

In Paulo Freire's work validity appears closely related to particular views of the socioeconomic. Here the strategy seems to be somewhat more complex: On the one hand, sociological notions like class, class interest, and so on, are used in the analysis as conceptual elements attached to the idea of validity and used to question it. For instance, it is said that knowledge corresponds to class interests, and this way readings of reality can be questioned by means of investigating the interests they serve. This has a practical methodological consequence, which consists in the fact that a new set of questions can be asked in the critical examination of a reading of reality, apart from "is it true?" or "is it justifiable?": "Who benefits from this being accepted?", "who benefits from this being claimed now?" (see Burbules and Berk, 1999). On the other hand, however, these more abstract and theoretical conditions of knowledge seem to be left on the side, being taken over by particular analyses that, while still in agreement with those theoretical epistemological ideas, present a particular well-developed [Neo-Marxist] reading of the socio-economic. The validity of other readings of socio-economic reality are then judged by comparison with Freire's reading. The centrality of this idea of validity can be further seen in the terminology used by Freire to characterise readings of reality or the minds that hold them: false/true consciousness, mystification, mythological mind, naïve/critical consciousness, etc.

Much of what I have just said about Freire applies to other authors in critical pedagogy, and even in post-radical pedagogy. In those approaches the idea of truth ceases to have

a role in the definition of critical consciousness. The idea of locatedness or situatedness becomes now crucial for an understanding of epistemology. Locatedness brings at least two dimensions into the analysis: Firstly, there is the claim that given that each person is located in a particular place in the network of relations in society, his/her experience will differ much from that of other people occupying different locations in the same network. And secondly, these different locations that different people occupy are also expressed through the different interests in relation to each other that they embody. For instance, given that society is structured along the gender dimension in particular hierarchical ways, then women and men will embody different interests according to this relation. The differentiality of experience is then taken to be a sign of the partiality of any experience as well as of whatever more theoretical conclusions and ideas a person draws from that experience. Because of this, the one-sidedness found in Freire's work—about the acknowledgement of personal and group interests shaping the oppressor's knowledge claims—is now lost. This becomes manifest further in the attack on the practical distinction between centre and margins, and on the power relations that subjugate, repress or silence particular marginal knowledges. It is also expressed in the consequent claim of the lack of a privileged epistemological position for any group. The idea of validity here, then, seems to apparently have been lost completely in the acknowledgement of partiality of experience. But this is perhaps too rough an interpretation: These elements are used to reveal the lack of absolute validity, and the partiality, of any reading of reality. It is important to point out that that partiality is investigated and explained by the authors using these approaches; that is, they provide not only the tools necessary for critical analysis, but also in pedagogical cases the analyses and explanations themselves. Validity appears in this analysis in a negative form, as something which cannot be attained in an absolute way.

In systems thinking, but particularly in Ulrich's CSH, validity appears as the ever unattainable ideal of comprehensiveness; that is, of the taking account of all the possibly relevant aspects. The impossibility of obtaining that comprehensiveness constitutes the partiality of all readings of reality, and it is represented in a systemic way: In the light of that impossibility one would have to select some aspects, which will be taken into account in one's analysis, proposals, etc., while leaving other aspects out. A system boundary is, then, drawn as the result of that selection process. Moreover, that boundary constitutes a normative suggestion—in the sense of not being

descriptive or justificatory, but prescriptive. And because Ulrich adopts a Kantian position as represented in his a priori science, he takes the justification of normative claims or sentences to be problematic and to occur very differently from that of sentences of a different kind.

The case of TSI is somehow different. In it, the main question is that of the validity of the individual systems paradigms that can be used to tackle situations in the social realm. In early versions of TSI, the analysis led to a description of their validity in terms of problem contexts, as defined in terms of variables taken from a Habermasian framework. Validity, then, came to be expressed in terms of this Habermasian anthropological argument and of whether these human interests were fulfilled. Each paradigm was seen to be limited to tackling, or at least emphasising, the fulfilment of only one particular human interest. As explained above, more recently in this strand of thinking this idea was set aside, and the questioning of validity has been addressed by means of the use of alternative rationalities as represented by the alternative systems paradigms, for questioning any actual or potential use of them. In this new understanding, the previous complementary nature of the roles assigned to the individual paradigms has been changed so that tensions between them are acknowledged but accepted as perhaps inevitable. It is not of my knowledge how validity comes to be represented under these new ideas, given that the questioning is produced from the alternative paradigms, but the change from the earlier notion of assumptions to the more recent one of constitutive rules as sources of questioning seems to point in the direction of a different understanding of it.

5.1.2 Source and Target Readings of Reality

As already explained in the introduction to this document, in order to produce questions to be asked of forms of knowledge or of knowledge-production processes, an approach has to be based on some form of theorisation that justifies the relevance and meaningfulness of those questions, and of the way their validity—in this case—can be assessed. I called these forms of theorisation, *theories of the critical*. Theories of the

critical say, at least, what goes wrong under what circumstances and why, even if it is only to say that it always goes wrong in one way or another. When dealing with the problem of validity, they will explain what the problems might be for claiming the validity of a piece of knowledge or reading of reality. As for the approaches examined in this document, the role of theories of the critical along the dimension of validity is played by theories of argumentation or epistemological theories of rationality (as in the critical thinking movement), Neo-Marxist theories of the social and of the economic (as in Freire and critical pedagogy), poststructuralist and/or postmodern theorisation of power mechanisms combined with theorisations about gender, race and class (as in critical and post-radical pedagogy), systems ideas combined with a Kantian theorisation in a reconstruction of the limits of justification in the realm of the practical (as in critical systems heuristics), and a Habermasian theorisation about human constitutive interests combined with systems ideas about complexity (as in early TSI), among others.

The use of the word *theory* is intended to mean that if one asks those questions, then this implies that one holds certain beliefs and in a way has acquired certain skills. Or, in other words, that it implies some active knowledge. These questions are meaningful in the forms of theorisation that engender them, and at least some of the beliefs implied in the theory of the critical will have to be held by the person applying the questions in critical examination. That is, to be able to ask any [set] of those questions one has to have a number of beliefs; beliefs about what evidence is and its relation to justification, or about the relation between knowledge and social groups' or individual persons' interests, and so on and so forth. This is so, in spite of the attempts by some authors to locate their own proposed theories in a universal common sense (see for instance Ulrich, 1983, page 306), or as presupposed in the act of communication itself (as in Apel and Habermas; see Biesta, 1998; Burbules, 1998; and Young, 1990 and 1992).

It is important to notice that theories of the critical are interconnected sets of beliefs or would-be beliefs—just like any other theory—*about* forms of knowledge or their production; that is, beliefs whose objects are forms of knowledge or knowledge-production processes. In this sense, they can be said to not be located on the same level as those pieces of knowledge or readings of reality they supposedly help us be critical of. That is, these theories have as their objects of discussion readings of reality, and not reality itself. This assertion is not completely accurate, however, for at least one reason:

In some cases the theories of the critical used may reflect or entail one or more readings of reality that may compete with, or be an alternative to, the reading of reality that is being critically examined. For the sake of clarity, let me call the latter the *target* reading of reality (or piece of knowledge) and the former the *source* reading of reality. This distinction is quite important because if a theory of the critical entails [source] readings of reality, then being critical—according to it—implies accepting part or all of those readings. And if that is the case, then they could be imposed, and criticality would become an active medium for knowledge imposition. Now, given that these theories of the critical *fill* with their concepts and claims—i.e., contents—the domain that the source reading of reality talks about, I will also refer to them as *content-full theories of the critical*. In the following section (5.1.3) I will discuss the case of such theories.

It might be argued that it is not necessary to use a competing [source] reading of reality in order to critically question or assess another [target] one, and that therefore a theory of the critical does not necessarily have to entail a reading of reality. That would mean that the theory of the critical is somehow independent from any competing reading of reality, and they would therefore be *content-empty theories of the critical*. It is difficult to determine to what extent this total independence can be achieved; however, the distinction between content-full and content-empty theories of the critical may still be useful, even if it only reflects a difference of degree rather than of category, and they are on both ends of the range. In section 5.1.4 I will examine the content-empty ones.

5.1.3 Content-Full Theories of the Critical

A further distinction should be made for the purpose of establishing the requirements that a content-full theory of the critical should fulfil if its corresponding critical approach is to be able to prevent knowledge imposition. Whereas an approach may advocate a particular reading of reality, another may simply show the existence of many of them, without really advocating any one in particular.

Advocating Content-Full Theories of the Critical and How They Work

Let us suppose that someone holds a theory valid for a particular domain or part of reality, and that s/he does so with much certainty³¹. Her/his holding that theory valid implies that s/he will have reasons for believing it so, and these reasons also and at the same time will be reasons for rejecting other alternative possibilities. Any of these reasons can be used as the source of a question to be asked to someone who advocates one of those alternatives. For instance, if someone says that the Venezuelan government has established cooperation links with the Colombian guerrilla group FARC, because the recently revealed video and memorandum by, respectively, the Venezuelan army and the Minister of the Interior are evidence for that (see El Espectador, 01/02/02), then at the same time and for the same reasons s/he is rejecting the Venezuelan president's claim that there are no such links. S/he could then ask someone supporting President Chávez's claim whether s/he has considered that evidence, and how the video and the memorandum could be accounted for. Similarly, someone might claim that some particular social policy is not a good one because its implementation would have harmful environmental consequences. From here questions like "have you taken into account the environmental consequences of that policy?" and "how is the resulting environmental harm to be justified?" appear, that can be asked to someone defending that policy. Furthermore, some more general and abstract claims could be produced by her/him, relating kinds of evidence with conclusions such as that one that was in question in the example: "In general, a good policy does not cause environmental harm". Those more general claims could then effectively become part of a theory of the critical. The point is that a theory of the critical can be produced out of a [source] reading of reality that effectively constitutes an alternative to the [target] one that is being critically questioned. Among the approaches reviewed in chapters 1 and 2, arguably the theory of the critical present in Freire's dialogical problem-posing education relies on a Neo-Marxist source reading of the socio-economic. It is from this reading that its critical questions are posed, as the students are led through a path that has been defined by it (see Taylor, 1993; also the discussion in subchapter 2.3). These

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³¹ For the purposes of my argument here, it does not matter whether this theory is about what is, about what ought to be, or both; or whether it is a *theory of* or a *theory for*.

questions are challenging, in the sense that they make students reconsider their views, and by doing this they help them go through the process of conscientisation from a naïve intransitive consciousness, to a deep and holistic critical consciousness (see Freire, 1973). But it is within the reading of reality espoused by Freire that these questions are meaningful and relevant and the possible answers to them are deemed correct or incorrect.

Let us notice now that the use of a content-full theory of the critical can be understood as the contrasting or the playing off of a target reading of reality against a source one. There are, of course, things that are said of particular local situations—e.g., about the specific situation of a particular group of students in one of Freire's educational projects—that a trans-situational and more general theory of the critical does not deal with. The source reading used in the contrasting act that I am suggesting, is constituted by the general aspects of the theory of the critical as applied to the local situation. Furthermore, the source reading that Freire uses, acts both at the level of describing reality and at the level of describing how that reality influences people's consciousness, and constructs a link between them: It says that if reality is oppressive, alienating, etc., then it will cause the consciousness of the oppressed to be false, mystified, deluded, etc. In this sense, apart from it being a theory of the socio-economic, it is also a theory of consciousness.

Non-Advocating Content-Full Theories of the Critical and How They Work

A theory of the critical can be content-full, without necessarily advocating a particular reading of reality. Let us take, for example, TSI (see subchapter 3.4). It provides some critical questions to ask about the use of the tools, methods, and methodologies associated to particular systems paradigms. Apart from those questions, the approach also provides to a large extent the different possible answers to them, as presumably given by the various systems paradigms. (Those answers can be said to partly be descriptions of the paradigms themselves.) TSI does not really advocate any of those paradigms in particular, and instead restricts itself to presenting them so that potential users get to know them, and to urging them to be critical about their use by means of

asking certain questions. The theory of the critical used by TSI is content-full, because it fills with content the domain of systemic problem-solving by describing the possible alternatives that exist in it—the different possible answers to its questions. But it is not an advocating theory of the critical, in that it does not favour any particular paradigm over the others. It uses various different competing source readings of reality, from which the questions are asked. Similarly, in most instances of radical and post-radical pedagogy it is now argued that readings of reality are always partial and historically influenced, and that no single reading can in this respect claim comprehensiveness. Because of this, this theorisation has talked less about false or naïve consciousness and more about dominant [male] [Western] [white] [middle class] discourses that have established borders to define a centre and its peripheral margins in ways that "reproduce relations of domination, subordination, and inequality" (Giroux, 1990, p.196). The aim here is to let discourses which have been repressed and subjugated for a long time finally come to the light, so that they can become available to potentially be used as alternatives for different purposes. The critical act here seems to still depend, in any case, on particular readings of reality; in fact, it would be an act of unearthing them. The approach does not advocate any of them—or at least that is what its proponents explicitly claim—but instead tries to make them publicly available for reflection. Criticality, then, would be associated here with a capacity to reveal the exclusions that are implied by a particular dominant discourse, so that those discourses subjugated by it reappear as possibilities. In doing this, the idea is also to "get students to question the partiality of both their own knowledge and the knowledge presented by the teacher" (Giroux, 1993b, p.173). A similar analysis could be provided about feminism and postmodernism-influenced post-radical approaches. What is important, however, is that in practice at least in some cases the dominant and the subjugated discourses alike are identified and pointed out by the critical pedagogue; when this happens, they would be providing the contents and therefore using a content-full theory of the critical.

Importantly, when a non-advocating content-full theory of the critical is used, the critical questions with which a target reading of reality can be assessed come from the various source readings. Given this, it can be concluded that the proponents of the critical approach believe that all the source readings are relevant and valid at least to some extent, which is why they propose to use all of them. In some mild sense, it can be further said that they actually advocate all of them, acknowledging limitations they

may have while at the same time recognising their potential relevance and validity. This is the same pattern that occurs in advocating content-full theories of the critical, although this time with multiple source readings.

<u>Prevention of Knowledge Imposition with Content-Full Theories of the</u> Critical

In the previous chapter I argued that when the strategy of addressing the problem of validity is used, the prevention of knowledge imposition occurs by means of the use by someone—e.g., a student—of a theory of the critical to question forms of knowledge presented to her/him. What that person questions and reflects on, is precisely what will not be imposed on her/him regardless of whether or not s/he in the end accepts it as valid. With a content-full theory of the critical, given that not only questions are provided but also the possible answers that give content to them, the reflection also necessarily includes the consideration of the alternatives represented by those answers. As this is made sure by the theory of the critical, that consideration will not depend on the alternatives happening to occur to those participating in the critical reflection or inquiry. The importance of this point can be seen in this: The different answers to the critical questions, given by an approach using a content-full theory of the critical, should be of some value so that they are worth reflecting on. If the source reading is advocated by the theory of the critical, then it is not simply considered to be relevant, but actually to be the valid one. If instead of this, the theory of the critical provides a number of source readings and not only one-without advocating any of them in particular—then there is an implicit claim that all these readings can potentially be relevant, or valid. If the source readings were not considered worth reflecting on, then they simply would not be there. This way, I take it that there is an implicit claim in Freire's work about the validity of a Neo-Marxist reading of the socio-economic, in feminist pedagogies about the relevance and validity of what is sometimes labelled the women's view, in TSI about the relevance and validity of each one of the systems paradigms as identified by its authors, and so on and so forth. And this is the main point for making use of a source reading: Aspects, alternatives, or issues deemed relevant and/or valid by proponents of the theories of the critical might not even be considered in the process of critical reflection if they are not explicitly included.

This issue is, of course, one of validity. But it belongs to the realm of validity in its direct connection to knowledge imposition. Failing to consider, say, a [source] women's reading of reality during the process of reflection, to contrast it with a [target] male reading, would be a way of perpetuating the imposition of the latter forms of knowing at the expense of the former. And if one considers that a women's reading might be relevant and/or valid, then this case certainly seems to be undesirable, and there will be no autonomy of thinking *in relation to those gendered issues that did not surface*.

In what follows I will now try to establish the requirements needed so that content-full theories of the critical can effectively prevent the imposition of knowledge. The two questions guiding this analysis are the ones posed at the beginning of this chapter: Can the approach avoid the imposition of its own favoured forms of knowledge or readings of reality? And can it prevent the imposition of other forms of knowledge or readings of reality?

Requirements for Preventing Knowledge Imposition: Inescapability

Let me start with the examination of advocating content-full theories of the critical, and the first of the two guiding questions just mentioned. If criticality is at least partly defined in terms of whether one holds valid the source reading of reality, then the process of becoming critical—or, in Freire's terms, *conscientisation*—is one of replacing the target reading by the source reading as the one preferred by the students. The imposition of the target reading is avoided, of course, but then there is the question of under what conditions it can be assured that the students will come to hold valid the source reading while they properly carry out the reflection process. If they should now adopt the source reading without imposition, then it should be inescapable. I will call this requirement *inescapability*.

I take it that inescapability in turn requires both *comprehensiveness* and *undoubtability*. The former would guarantee that everything that should have been taken into account in the consideration of whatever is being discussed has already been done so, and that it is

the right issues which are being discussed. The second characteristic would guarantee that each proposition of the source reading under scrutiny will be accepted leaving no room for alternatives. It is important to stress that undoubtability does not mean "evident at just a first glance". There may be much analysis to do, to go beyond what is apparent, superficial, and evident. (Criticality in general would be, precisely, about those things that have to be revealed because they are not readily apparent.) These two characteristics are not necessarily distinguishable from each other in a clear-cut manner: Lack of comprehensiveness can constitute a reason for doubting a conclusion. The distinction can be useful, though, if it helps to illuminate the fact that it is not only falsehood that is at stake—as related to being doubtable—but at least also irrelevance and insufficiency.

Let us notice that the issue of certainty on one's knowledge is not taken here as a subjective one. The main problem discussed in the work in philosophy is whether one is justified in being certain about some of one's beliefs. The argument might be stated as follows: If one is inappropriately certain—that is, for the wrong reasons—about some of one's beliefs, then some questioning and one's inability to respond properly to them—because of one's certainty being wrongly justified—should guarantee that one changes one's views or beliefs on the subject, or at least one's certainty about them.

If there is not one source reading of reality which is advocated by the approach, as in non-advocating content-full theories of the critical, then the requirement of inescapability is simply not necessary, at least in the way it was stated above. What people are asked to do is to consider different readings, alternative to the target one, but each one of them does not have to be inescapable. This inescapability requirement, nevertheless, seems not to appear at the level of individual source readings, but at that of the total set of them as provided by the theory of the critical. That is, when a critical approach defines criticality in terms of reflection and questioning of a target reading from a specified set of source readings, it is the totality of those source readings which establishes a unit that requires to be inescapable. This would mean that this set contains all the relevant critical questions and all the possible answers to them. If this is not the case, then other questions and other answers that are not actually considered—because they are not included or provided by the set of source readings—could still be silenced. Even though one might expect that normally the consideration of a set of source

readings would have a larger scope than the consideration of a single reading, the possibility of there being something *beyond the system* implies that it might still be imposed. Unless, just like before, the set itself is inescapable. In this case, inescapability would be more closely associated to comprehensiveness than to undoubtability, given that the possibility of not reaching a sure conclusion and having to be content with a range of options are explicitly expressed in these approaches.

To conclude this section, let us notice that inescapability, if fulfilled, would at least partially provide an answer to the two guiding questions. If the source reading is inescapable, then students would assuredly adopt it as valid at the end of a proper reasoning process, and at the same time it would have provided every possible relevant aspect that might exist, about the object of inquiry.

Requirements for Preventing Knowledge Imposition: *Interpretation Independence*

When discussing the inescapability requirement, it was assumed that the source and target readings of reality were unproblematically ready for reflection; that is, that their identification was not a problem. As is clear from the arguments by critical pedagogues who use semiotic tools to reveal *hidden* messages (see Duhan Kaplan, 1991), that assumption is not a correct one to make. Can one then get around that problem by means of the use of such semiotic tools? This seems a good way out. Is it enough? Let me reformulate the question to make it more visibly relevant to the issue of knowledge imposition: Can one—by means of using whatever tools available, semiotic or otherwise—identify the forms of knowledge that are to be critically questioned in a way which is neutral with respect to the readings of reality one holds? If that identification is not independent from one's reading of reality, then a content-full theory of the critical might impose a reading of reality via the identification or interpretation it makes of other readings, either source or target.

This issue is very closely related to that of interpretation, or of how one understands forms of knowledge as espoused by other persons. If the interpretation of a reading of reality depends on the readings held by the interpreter, then imposition might result

from the use of a content-full theory of the critical. Therefore, what is required is that interpretation be independent from the interpreter's readings of reality, or, as I will call it, that there be *interpretation independence*.

Is the fulfilment of this requirement also necessary for advocating content-full theories of the critical? Yes, for just the same reasons presented above. However, in that case it really does not matter because if the source reading is inescapable, then any interpretation that depends on it will also be inescapable.

5.1.4 Content-Empty Theories of the Critical

The main feature that characterises content-empty theories of the critical is the fact that they do not make use of a source reading of reality from which the critical questions are formulated. The theory of the critical remains completely at the level of readings of readings of reality, without talking about the same objects that the target readings talk about. They are, then, independent from readings of reality. That is, they do not make use of source readings. In Paul's words, whose approach I take to represent this kind of theories of the critical, "no matter what views one might possibly adopt, there is always an *independent* question to be raised as to the manner in which one comes to hold those views" (1994, p.197, my italics).

It is not very clear whether some theory of the critical can achieve total independence from particular readings of reality; theories *about* and *for* readings of reality which do not imply a particular reading of [some part of] reality, and which are not affected by changes in readings of reality³². That is not a necessary feature for making my distinction useful, though, for it does not intend to show a qualitative discontinuity between two categories. It would suffice if it can be shown that there are theories of the critical which are less directly connected to particular [source] readings of reality than others. In that case the distinction would describe extreme points in a continuum.

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³² Quine has suggested that even the laws of logic can be changed in the light of tensions produced in other locations in our webs of beliefs; e.g., beliefs about quantum mechanics (see Quine, 1953a).

Theories of logic and of argumentation are perfect candidates for content-empty theories of the critical, because they do not specify contents. Therefore, the approaches proposed by authors of the Critical Thinking Movement can be included here, as it seems that their work has been aimed at the production of a worldview-independent, context-independent, and domain-independent theory of the critical. However, there are other theories of the critical which follow a similar pattern: Ulrich's CSH and boundary critique, for instance, also propose general abstract theories of the critical that do not specify contents. Now, in the previous section I described radical pedagogy as having produced non-advocating content-full theory of the critical. However, with some theoretical abstraction the divide between the two levels can be created again. As explained before, theories of the critical that entail a reading of reality take this reading as a source for criticality, or as a source for producing the questions which are to be asked from the piece of knowledge in question. If, however, these questions and the concepts involved in them are abstracted from the particular reading of reality they come from, they can become so detached that this reading is no longer absolutely necessary. For example, the favourite target readings for critical pedagogy are those identified as coming from the dominant culture, normally described as male, middleclass, and white. Alternative readings would be represented by alternative labels like female (or even androgynous), working-class, non-white, etc. Importantly, of course if one labels the target reading that way, one would already have an idea of what its alternatives might be, even if a vague one. To the extent that these are already suggested or at least hinted at, the kind of criticality promoted is one which depends on them, and therefore the theory of the critical used will not be completely content-empty. But if this naming is not made and the alternatives are not already suggested, then the theory of the critical can become detached from them. In this case, it could be used by others *independently* of the reading of reality they make in particular. That is a frequent occurrence in critical pedagogy.

This independence sets a constraint on the kinds of things that theories of the critical of this kind can talk about; that is, about the objects in its domain. Let us suppose for the moment that the target reading represents some form of knowledge in the realm of the socio-economic. If there is something in the theory of the critical about the socio-economic, then that might constitute an alternative to the target reading, and some of its

claims might be directly opposed it. This has as a consequence that the two levels mentioned above—of readings of reality, and of readings of readings of reality—have to be kept separate, for otherwise the latter might intrude in the former.

<u>Prevention of Knowledge Imposition with Content-Empty Theories of</u> the Critical

The strategy is, in general terms, the one common to all approaches tackling knowledge imposition via the problem of validity: By providing some validity questions that are to be asked of the target reading of reality, there is a process of reflection about it which tries to guarantee that it will not be uncritically accepted without a proper assessment. In this case, by providing some categories for questioning target readings, the different possibilities or choices made inside each one of those categories can be contrasted to other possibilities. This way, for instance, CSH provides twelve categories (*client*, *objectives*, etc.; see section 2.2.1) and questions (*who is/ought to be the client?*, *what are/ought to be the objectives?*, etc.) for reflection about any proposed social system, without stating which choice of answers is correct, or which ones are the different possibilities. It is, then, the consideration of alternative answers to those questions (alternative *clients*, alternative *objectives*, etc.), that one can imagine, which prevents the imposition of particular answers to them.

Requirements for Preventing Knowledge Imposition: Givenness

The main difference with non-advocating content-full theories of the critical is that those alternative possibilities from which one is to choose are not already provided by the theory of the critical. How does this affect the way in which knowledge imposition is prevented? Firstly, and contrary to what happens with content-full theories of the critical, by not specifying the possible answers to the questions given, no comprehensiveness in the range of possible answers is required, and therefore no

inescapability³³. That is, content-empty theories of the critical avoid the problem of imposing answers, and with them source readings of reality. Inescapability is not a requirement for them.

But there is something which was said about content-full theories of the critical in section 5.1.3, which has a lot of relevance for the content-empty ones: By making use of source readings they made sure that the questions and answers entailed by those source readings were actually considered, and that therefore their consideration did not depend on them happening to occur to those involved in the process of critical reflection. That does not happen with content-empty theories of the critical. So, to take the example used in the previous section, in CSH there is no in-built guarantee that a particular type of client, or of objective, will be actually recognised and/or reflected on. That assurance would have to be given by something else; and the only way I can see this happening is that all the possible answers to the questions—all the possible clients, all the possible objectives, etc.—be given in themselves; that is, that they be readily knowable as possible answers without this knowledge being dependant on any theory or reading of reality. I will term this, the requirement of givenness³⁴. If there is no givenness, then the critical approach cannot guarantee that relevant forms of knowledge will be identified as such, and then questioned. Therefore it will not guarantee that there will not be knowledge imposition.

Requirements for Preventing Knowledge Imposition: *Interpretation Independence*

In the case of content-full theories of the critical, interpretation independence was required so that the interpretations of source readings would not be a vehicle for the imposition of a particular reading. In content-empty theories of the critical, as there are no source readings, there is no interpretation of them. However, there is a question about whether particular interpretations are necessarily made at the moment of using the

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³³ To be strict, comprehensiveness is required, but this time at the level of the categories, and not at the level of the contents filling those categories. Or, in other words, at the level of reading readings of reality, and not at the level of reading reality.

³⁴ The reasons why I have chosen this expression will be clear in the next chapter, where I will discuss a similar scheme in empiricism.

critical approach and asking the critical questions it provides. That is, the proponent of the critical approach—e.g., the informal logic theorists, or Werner Ulrich, etc.—may not impose their own readings; but will the user of the approach need to make use of her/his own readings in order to use the tools? If so, and if that use implies that the result will be a reflection of her/his views, then s/he may impose those views as valid because presumably *they are critical*. The risk here lies in the fact that *being critical*, just like *being an expert*, already has a connotation of knowledgeability. Duhan Kaplan has remarked, about the work of the Critical Thinking Movement, that it promotes the creation of an elite characterised by the use of a fancy terminology, who would be at a rhetorical advantage to advance and impose their own views on others.

5.2 THE PROBLEM OF PEDAGOGY

In the previous subchapter I analysed the problem of validity in its relation with knowledge imposition, and it is time now to do the same with the problem of pedagogy. As explained in the previous chapter, the problems of pedagogy and validity should be seen as distinct from each other, but not as mutually exclusive: One single approach may use both strategies simultaneously.

5.2.1 Pedagogy as a Problem

As mentioned in section 4.3.2, the problem of pedagogy represents a refusal to talk about contents, and instead focuses on the interactions between persons in a given setting—in the case that concerns me, in the classroom. This way, whereas theories of the critical dealing with the problem of validity may be about interactions in knowledge-production processes as well as about contents exclusively, when they deal with the problem of interactions their only object of inquiry is the interactions in which the persons of direct concern—i.e. those upon whom knowledge can be imposed—

participate. The problem of pedagogy, then, is a problem of interactions. But not all issues of interactions are about knowledge imposition, though, as is evidenced by the fact that validity of forms of knowledge depends, in the view of some authors, on the interactions that constitute the process of its production.

A general characteristic shared by most of the approaches dealing with the problem of pedagogy is their concern for the issue of the symmetry or asymmetry of the interactions. The desired kind of conversation, or at least the kind postulated as not generating knowledge imposition, would be one in which all the participants in conversation—and particularly the students—have the same opportunity to advance their ideas and question those of others. For the purposes of the present study, it is not really too important if the achievement of that symmetry is ideal or utopian, as long as it provides an opportunity to inquire into actual processes of knowledge production. Additionally, the symmetry does not necessarily have to refer to actual practice of interactions, because it may lie on the possibility and capacities that the various participants in conversation have, and not on how they use them. This case is, however, a difficult one to assess.

In general, it can be said that the problem of pedagogy is a problem of describing the interactions in the classroom and classroom-related activities, such that a good understanding of symmetry and autonomy in knowledge-construction can be obtained.

Similarly to what was said in respect of theories of the critical for the case of the problem of validity, for addressing the problem of pedagogy there also has to be some theorisation which explains and justifies the questions provided by the critical approaches for inquiry into interactions in what I called at the end of chapter 4, the immediate space of interactions. This theorisation will serve different roles, but one of central importance for the discussion in the present document is the specification of the relations between recognisable forms of interaction and the imposition of knowledge. That is, theories of the critical will establish what kinds of interactions either constitute or produce knowledge imposition³⁵.

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³⁵ I should say that sometimes it is not clear in some approaches whether one is to understand those patterns of interaction as constituting knowledge imposition, or as causing it. For the purpose of this discussion the distinction is not so relevant, and I will leave it at that.

Interestingly, although the large majority of the approaches that I have examined in this document deal with the problem of validity, the problem of pedagogy is really only addressed by a small group of them. Furthermore, among these only very few have really made it their central focus of concern and have effectively developed it. That is, in some cases rather sophisticated pedagogical theories of the critical have been proposed, whereas in others they appear to have been developed more intuitively and less systematically. Some theories of the critical addressing the problem of pedagogy are a Habermasian theorisation on ideal speech situation (as in Young's approach), a Foucauldian micro-level analysis of discipline and control (as in Gore's), Freire's Christian thought-influenced ideas on pedagogy, and Beer's Syntegration protocol.

Neither the critical thinking movement nor the various approaches in systems thinking—with the exception of the Team Syntegrity protocol—have taken as their concern the form that the interactions between participants take in the conversational processes. In this respect, the most that is really said in an explicit way is that some kind of conversation should occur, but no attempts are made to describe or qualify that conversation according to its more *formal* aspects and elements. Some rules for the conversation are set, but they relate exclusively to the contents of what is said, claimed, or questioned by the participants understood as an abstract unit; that is, in terms of issues that *must be* brought up, or questions that *must be* answered, without any explicit reference whatsoever to the individualities of the participants.

In what follows I will describe the ways in which particular approaches have dealt with the problem of pedagogy. I have made use of a distinction that I had already indicated in the previous chapter. This is a distinction between the critical examination of the immediate space of interactions involved in education—the *here and now* of the pedagogical relations—and the larger societal spaces of interaction that surround the classroom, that I have called non-immediate. Again, these do not need to conflict with each other, and both might be present in the same approach.

5.2.2 Pedagogical Theories of the Critical

In education the immediate space of interactions is normally associated very specifically to the relations between teacher and students *qua teacher and students*³⁶. That is, the roles that are considered are these two in particular, and it is their relations which are taken as the centre of critical reflection. If any other roles are brought into the analysis (e.g. differentiated by gender, class, or whatever is the case), then this means that external factors are being considered.

One approach which clearly takes this as the core concern is the Habermasian one developed by Young (see subchapter 2.5 of this document). Firstly, in this case it has been only the problem of pedagogy which has been addressed, as can be seen in the following remark (already quoted earlier):

I would prefer (...) critique to be something that does not spring from externally applying a supposedly non-ideological system of ideas to criticise speech habits. I want to avoid the problem of justification that arises when I seek to claim that my system of ideas about men and women, children and teachers is non-ideological and so permits me to point out ideologies from 'on high'. If I can find a basis for critique that is both content-free (...) and internal to language, I will have avoided this burden. (Young, 1992, page 72)

That is, by recognising the problem of the justification of the theory of the critical from which any criticism or assessment of a target reading of reality is made, when that theory of the critical somehow advocates some reading of reality, Young takes the Habermasian stance according to which the basis for critique should still be linguistic, but not related to the contents of a target reading of reality—in his words, "content-free" and "internal to language". But let us further notice that Young's approach is based entirely on an analysis of the relations between the teacher and the students, *qua teacher and students*, as seen in the events that occur in the classroom. Even though some

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³⁶ In other non-educational contexts different roles like facilitator, client, etc. might be relevant.

mention is made by him of societally institutionalised forms of exclusion from discourse, his descriptions of patterns of interaction that constitute the different forms of communicational structures are exclusively tied to what happens in the *here and now* of the classroom, and to the roles immediately visible in it (i.e., teacher and students). Importantly, the kind of description provided by Young distinguishes between on the one hand communicative structures in which control is exerted on some participants so that their possibilities of speaking and questioning are effectively limited—like those of *guess what the teacher thinks* and *socratisation*—and on the other structures in which all participants have access to this recourse, like *discourse*³⁷.

Another approach which deals with the problem of pedagogy in the immediate space of interaction is Paulo Freire's. His descriptions of banking education and of its opposing alternative of a dialogical education, are based on aspects of the relation between teacher and students (see, for instance, the ten points which define banking education in subchapter 2.3, and in Freire, 1970, pp.46-47). And this distinction is designed to distinguish between an indoctrinating form of pedagogy and an empowering one. Freire's characterisation of the interactions that take place in the space of the classroom is, however, expressed in much more general terms than those used by Young; that is, he does not attempt to reduce these interactions to more easily observable and less vague elements.

Similarly, Gore's Foucauldian approach has made use of certain functions of speech as found in Foucault's texts, to characterise the ways in which acts of discipline and silencing take place in different educational and inquiry settings (see section 1.3.2 above; and Gore, 1995 and 1997). Her approach, interestingly, is the one that takes the smallest units of analysis of all the ones examined here, as can be seen from the fact that most of the time it is single sentences which are considered enough for determining that a particular control function is in play. The question of what form of interactions might encourage autonomy of thinking is not a clear one in Gore, though. Let us recall that she handles and puts to test the Foucauldian hypothesis that forms of control and silencing are always present; and from this it might be concluded that therefore imposition is taken as a given. Nevertheless, her way of finding support or opposition

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³⁷ Granted that, as Young has pointed out, the desirability of some forms of communication structures is not straightforward and should be analysed in relation to each particular context.

to this hypothesis is by using empirical means of observation of the interactions in the classroom—or whatever setting. This observational choice implies that it might be possible, at least in principle, to observe situations in which control and silencing do not exist.

The work of Chouliaraki (1996) also represents this form of micro-level analysis of forms of control and discipline, and the empirical observation used by this author suggests that the same considerations expressed about Gore's work also apply here.

Other feminist approaches, like Luke's, have also taken the classroom interactions as central for the development of a pedagogy that allows and encourages students to develop their own reasoning and beliefs (1996). In this case, the main concern is how personal relationships are established, maintained, and developed, through different attitudes like that of caring, and which can be contrasted with what are labelled as patriarchal authoritarian forms of interacting. This attitude seems to refer more to how teacher and students interact, than with what particular views they hold.

Requirements for Prevention of Knowledge Imposition: Givenness

Let us recall from the previous subchapter that I postulated givenness as a requirement for content-empty theories of the critical dealing with the problem of validity, in virtue of their lack of specification of the possible answers to the questions they provide for critical reflection. The problem, then, was that it was not intrinsically guaranteed that certain forms of knowledge that could have already been imposed would be questioned. This means that the risk of perpetuating that imposition might not be avoided unless a particular requirement was met. This requirement, it was concluded, is that the possible answers to those questions be given; that is, that they be readily available in a way that is neutral and independent from any readings of reality³⁸.

In the case of pedagogical theories of the critical, their total lack of specification of contents is still sharper in that neither the questions nor their possible answers are

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³⁸ A reading of reality would be characterised by the particular answers chosen, but the questions are taken to be independent of such readings.

formulated. This means that the requirement of givenness that these theories have to comply with has to be established in a stricter way. One of the following two options seems to be required:

- 1. Questions and answers do correspond to something (e.g. reality) which is given; that is, which is readily available in a neutral and independent way from any readings of reality. If this is so, then there is no need to specify any categories for reflection on contents—for they are available in the world—and only a pedagogical approach to imposition is needed.
- 2. Questions and answers are given by the concerns of the community and of the participants who are engaged in the educational or inquiry process, and nothing else is needed. The key point would lie on the last bit; the "nothing else is needed". This could be the case if, for example, one can equate legitimacy or consensus with validity or truth. I also take this as being part of the requirement of givenness, although it must be said that givenness is here related to community and to the interactions between the participants in conversation, and not to something external to it.

Let us also notice that in both cases there is something (either reality or community), that lies beyond interpretation and is publicly available, which is taken to make readings of reality true or valid.

5.3 SUMMARY OF THE ARGUMENT

Here I have described in more detail two strategies with which the problem of knowledge imposition has been addressed by the approaches discussed in chapters 2 and 3; namely, via the problem of validity, and via the problem of pedagogy.

The problem of validity refers to the question of how someone can properly question the validity of forms of knowledge or readings of reality. In relation with the problem of knowledge imposition, the problem of validity is relevant insofar as one of the strategies identified to address it consists in giving students tools to question the validity or grounds for acceptance of the various forms of knowledge that they actually do and potentially can receive from different sources. The idea is that with the skills and disposition to use these tools, the forms of knowledge questioned will not be imposed on them. That is, the idea is that if a form of knowledge is accepted, that will have happened on the basis of their careful and responsible consideration by the student in question, if that is possible at all, or with the proviso that the form of knowledge in question has certain limitations that have to be acknowledged. A classification introduced here of the various possible kinds of theories of the critical dealing with validity suggests that there are various degrees of openness of the critical questions provided by the various theories of the critical. At one end of the spectrum there would be questions with a limited set of possible answers, which are themselves provided by the theory of the critical. As those possible answers suggested by the theory are sentences about reality—they are parts of one or more readings of reality—these theories of the critical were said to entail one or more [source] readings of reality, or to be content-full. At the other end of the spectrum there are questions for which the possible set of answers is not explicitly defined in them, and is therefore left open. As there is no advocacy for any particular answer, given that the possible ones are not even specified, these theories of the critical do not entail a reading of reality and are said to be content-empty. Content-full theories of the critical allow one to ask some specific questions with which students can question the validity of any forms of knowledge presented to them. These questions come from the source reading/s of reality, and in that sense by accepting the relevance and meaningfulness of those questions, whoever asks them and uses them to carry out critical reflection or analysis is implicitly accepting, at least partially, the readings of reality that they come from. A content-full theory of the critical therefore was said to advocate, even if only to some extent and in partial terms, its source readings of reality. However, they also bear the risk of imposing the reading of reality entailed by them, and can only avoid it if it is somehow ensured that the students will unavoidably come to believe that reading. Content-empty theories of the critical also allow one to ask some questions for inquiring into validity, but without specifying too clearly the possible answers. Because of this, on the one hand these theories do not impose a [source] reading of reality, but at the same time it is not at all too obvious that specific aspects of [target] readings of reality will be identified so that their imposition will be prevented. It was suggested that for this to happen, all aspects would have to be given and independent of particular interpretations.

The problem of pedagogy, or interactions, in relation to knowledge imposition, refers to the question of finding out what kinds of interaction, as described in formal terms which are largely independent of the content being discussed, determine or influence the adoption by the students of certain forms of knowledge advocated by various possible sources, including the teacher (that is, both within and without the classroom). Two different relevant spaces of interaction were found to be dealt with in the literature: The first one being immediate, usually referring to the space of interactions in the classroom; and the second one located outside of the classroom. In the latter case sometimes the students do not even participate in the production of knowledge that takes place there, but it nevertheless has some influence on their beliefs. It was found that an analysis focusing only on the immediate space of interactions would require, in order to successfully prevent knowledge imposition, just like content-empty theories of the critical, that all the possible elements of questioning be visibly available for all participants in dialogue to draw upon them for formulating questions; that is, that they be given. In the case of approaches focusing on non-immediate spaces of interaction, it was found that when the critical analysis—coming from the theory of the critical used is presented to the students so that they can use it to question the legitimacy of processes of dialogue outside the classroom, and the partiality of the knowledge produced there, it becomes a case in which the object of study—in this case interactions in knowledge-production dialogues—has already been described by the teacher, and therefore this description becomes the entailed and advocated source reading of reality. In this way we would be back in the problem of validity for theories of the critical that advocate its source reading; and in that case it was found that the requirement for the prevention of the imposition of the source reading is its inescapability.

The following table attempts to make clearer the set of categories—concerning strategy and type of theory of the critical—that I presented in this chapter:

Approaches that deal with the problem of validity			Approaches that deal with the problem of pedagogy
Content-full		Content-empty	(Content-empty)
Advocating	Non-advocating	(Non-advocating)	(Non-advocating)
Freire's approach, Critical Pedagogy	Critical Pedagogy, Post- radical pedagogies, Total Systems Intervention	Critical Thinking Movement, Critical Systems Heuristics, Interpretive Systemology	Pragma-dialectics, Young's, Gore's, and Freire's approaches, Team Syntegrity

Now, the idea of content-full and content-empty theories of the critical can also be seen, according to this table, as something that specifies a gradualism from left to right. The more one goes to the right of the table, the less content is entailed by the theory of the critical; that is, the less beliefs about content one has to accept in order to apply it. As I had said before, the categories may be taken as simply pointing at extremes in a gradual scale; and additionally, it is not clear that any theory of the critical dealing with the problem of validity can avoid using some form of content—not even forms of critique which may seem to some as being purely procedural, such as Adorno's bare dialectic method, because for the procedure to make sense as a form of critique that deals with the problem of validity it necessarily has to be based on ideas about the validity of forms of knowledge. But the distinction may still be useful insofar as one can recognise that some approaches demand from one to accept more beliefs than others.

To recapitulate, Freire's approach and (recent) Critical Pedagogy have been described as advocating content-full approaches dealing with the problem of pedagogy because they demand from the critical person the acceptance of a source reading of reality, and particularly a particular way of understanding social and political issues in society. The status of Critical Pedagogy is not so clear, though, as should be apparent from the fact that I have also located it in the content-full non-advocating category. The reason for this is that some of its proponents have explicitly argued that being critical does not depend on the particular views one holds, but on some critical knowledge one produces about those views held by oneself as well as others. In general, Critical Pedagogy, Post-radical pedagogies, and Total Systems Intervention are located in that square because they are based on the idea that the various possible views concerning some topic are to be presented, together with a critique of them. In this case, it is the particular interpretation presented what is demanded from the critical person to accept. The

proposals of the Critical Thinking Movement, Critical Systems Heuristics, and Interpretive Systemology, are said to be content-empty—and therefore nonadvocating—because, still dealing with the problem of validity, they specify only a set of rather open questions or categories for critical analysis of readings of reality; but they do not specify what those possible readings are or the answers they (the readings of reality) have made concerning those questions or categories. Finally, in the category of approaches dealing with the problem of pedagogy belong those which concentrate on the way interactions take place between participants in conversation, normally in the classroom: Pragma-dialectics, Freire's approach, Young's approach, Gore's approach, and Team Syntegrity. This is the *emptiest* it can get in terms of content, given that the conceptual categories that their theories of the critical will provide do not specify anything at all about what the conversation is about. In this sense some content, even if minimal, can be seen in content-empty theories of the critical in that the critical categories and questions they use are about content. Let us notice that Freire's approach has been classified on both ends of the spectrum. The reason for this is that, as explained in subchapter 2.2, he tries to tackle knowledge imposition on two fronts, and actually by means of two different pedagogical elements: a dialogical education (on the right end of the table) and conscientisation (on the left end of the table).

PART III

6. ON CRITICALITY AND READING REALITY

At the end of part II some requirements were specified as necessary so that the various kinds of approaches reviewed in part I could effectively and exhaustively prevent knowledge imposition. In part III I will examine thoroughly those requirements, making rather extensive use of developments in the philosophy of language.

Some of those requirements were defined in terms of the readings of reality one makes, and the way in which one acquires beliefs. That is, the way in which one produces one's readings of reality. Another requirement was defined in terms of the way in which we acquire beliefs about other people's readings of reality; that is, the way in which we interpret them or produce our readings of their readings of reality. In this chapter I will discuss the first set of requirements—namely *inescapability* and *givenness*—leaving for chapter 7 the discussion of the other one—namely *interpretation independence*.

Let us recall that when applied to a source reading of reality, the *inescapability* idea suggests that a proper inquiry will unavoidably lead the inquirer to hold that reading true. In the case of critical approaches making use of a set of alternative readings of reality instead of a single one, what is required is that the set of readings as a unit—even if full of elements of incompatibility between them—be inescapable; that is, that they provide all the possible relevant answers and questions about a particular domain of action. In these two cases, the risk is that of imposing the source reading(s) of reality. *Givenness*, in turn, can be expressed as referring to the idea that critical reflection can be complete with just the formulation of certain questions—provided by the theory of the critical—without any specification of their possible answers, or the possible aspects that might be covered in those answers, because they are taken to be given. It is related to inescapability in that it can be thought of in terms of requiring those possible answers to be identifiable in an inescapable way.

In philosophy, the search for inescapable forms of knowledge has arguably been manifested in the search for foundations and the epistemological project. My conclusion, mainly following Richard Rorty's work, will be that any foundational elements that can guarantee some kind of inescapability and epistemological certainty cannot exist. The reasons why I take here the philosophical tradition that Rorty embodies has already been presented in the introduction to this document. The main point, to remind the reader, consists in the fact that a philosophy of language which was not itself a basis for critique—and which therefore had to take itself for granted—was needed to study the relations between critical knowledge and first-level knowledge.

In subchapter 6.1, drawing on Rorty, I will describe the emergence of the epistemological project in Western philosophy and the search for foundations that it entailed. Subchapters 6.2 and 6.3 deal with two proposed forms of such foundations, which I take to give rise to two forms of certainty, and therefore of inescapability: conceptual—or analytical—and empirical. They are derived from the Kantian theorisation that characterises what Rorty has called philosophy-as-epistemology. The main authors whose texts I make use of here are Quine and Sellars. Rorty actually argued that neither Quine nor Sellars really made use of each other's contributions to philosophy, and that therefore some remaining elements of foundationalism can be found in their writings (Rorty, 1979, pp.180-182). However, Donald Davidson's philosophical work is considered to have kept both Sellars' and Quine's holisms, but to have been purified of any remaining foundationalism (see Rorty, 1991b; Arcilla, 1995; and Ramberg, 2000). Subchapter 6.4 will present some of Davidson's basic proposals for understanding language, although the discussion will be largely centred around his attack on the scheme-content distinction. I take this distinction to have sought to provide grounds for both an idea of empirical foundation and some form of conceptual relativism. Subchapter 6.5 retakes the discussion about criticality, attempting to give a practical application to the conclusions of the previous subchapters. Here I will be arguing that if correct, the view of language presented here shows that the requirement of *inescapability* cannot really be met, and that therefore the door is open for knowledge imposition to occur in approaches which needed it. Lastly, in subchapter 6.6 I address the issue of whether the *givenness* requirement can be met. Given that the discussion in the first subchapters has mainly concentrated on the requirement of inescapability, in order to properly address givenness in this last subchapter I develop some further elements of the holistic anti-foundationalist view proposed here.

6.1 FOUNDATIONS FOR KNOWLEDGE

6.1.1 Inescapability and Foundations

The general idea of finding some foundations for knowledge is derived from the desire to have some kind of limit of argumentation in which justifications are no longer needed because of the self-evident true nature of those foundations. The problem can be seen as follows: When justifying the truth claim of a sentence, one will have to use other sentences. Those sentences, in turn, would also have to be justified, but then this seems to take one to an infinite regress. If one can only be certain of the truth of a sentence if it is properly justified, how could one ever, then, given the infinite regress problem, be appropriately certain of anything at all? The foundationalist attempt to respond to this question consists in trying to find something outside the play of sentences justifying other sentences—which I will call, with Sellars (1956), the *logical space of reasons*—that can make true [at least certain kind of] our sentences.

A foundationalist philosophical analysis would then provide a once-and-for-all justification of all sentences of that kind, if produced under appropriate circumstances. Just what those circumstances are is to be determined by a theory, in this case a theory of knowledge (Rorty, 1979). This basically means that if such a theory can be specified, and therefore foundations for knowledge can be found, there will be some sentences, belief in which will be compelling, and about which there must be total certainty. These sentences, that together would constitute a reading of reality, will be inescapable. As Rorty puts it, "the theory of knowledge will be the search for that which compels the mind to belief as soon as it is unveiled" (1979, p.163); its original

dominating metaphor being that "of having our beliefs determined by being brought face-to-face with the object of the belief" (ibid.).

Let me call this compulsion to belief, epistemological certainty. It would furthermore have the property of being compelling for everybody, so that anyone could acquire those related beliefs without the need to have them imposed. To find a source of certainty for the source reading of reality used by the theory of the critical is, then, to find solid grounds or foundations that will guarantee it. It is precisely the idea of grounding knowledge that, according to Rorty, had dominated philosophy at least since Kant:

Kant (...) managed to transform the old notion of philosophy (...) into the notion of a "most basic" discipline—a *foundational* discipline. Philosophy became "primary" no longer in the sense of "highest" but in the sense of underlying. (1979, p.132)

Rorty further argues that philosophy after Kant, and because of him, understood itself as being in a "quest for certainty, structure, and rigor, and [attempting] to constitute itself as a tribunal of reason" (ibid., p.166). As Arcilla has put it, this project of philosophy as underlying the rest of culture "presumed we could identify that body of knowledge, those 'first and ultimate truths,' which constitute the natural criteria for establishing what else is true and valid in our culture" (1995, p.27). Those "first and ultimate truths" would be the ultimate sources of epistemological certainty. One of their characteristics would be that the knowledge represented by them should not depend on anything else, for otherwise they themselves would in turn have to be justified. Furthermore, whatever it is that a particular source of certainty is, it has to stand in a certain relation to our beliefs in which it can make them true, while at the same time being knowable in a manner independent from those beliefs.

It has to be said that arguments against foundationalism are already quite common and therefore this may not be an entirely original contribution. The idea that knowledge is not to be thought of as having foundations has been present in contemporary philosophy for a long time now, and it is certainly also present in many of the critical approaches here reviewed. The argument has to be here, though, if only for the sake of

completeness, to show why content-full theories of the critical that advocate their source reading of reality cannot avoid knowledge imposition, and moreover, will actively encourage it. A second reason is that the elements of this analysis will be useful for my arguments in the following sections, in which I will address the possibility of avoiding knowledge imposition for other forms of theories of the critical. But a third reason is that this account of foundationalism may not coincide in many points with some others: Actually, in this view many approaches whose proponents think of themselves as antifoundationalists, will look like not having completely got rid of the compulsion to have a non-epistemic anchor, that can be taken as a foundation.

6.1.2 A Theory of Knowledge

As mentioned before, the idea that a theory of knowledge is needed comes from the attempt to link bits of knowledge—i.e., sentences of a certain kind—with something outside of language, such that those sentences do not need any further justification. The problem is one of how to establish that connection.

According to Rorty, our present understanding of a theory of knowledge is strongly based on Kant's ideas, although originally the idea is a legacy from Locke. But Locke's proposal was in turn made possible by Descartes' postulation of the mind as a substance which is separate and distinct from the body and the rest of matter (see Rorty, 1979, ch.III). Very briefly, Locke's idea is represented by the metaphor of the *wax tablet*: Objects in the world make impressions in our inner space, through our sense organs. Taking into account that his intention was to provide a quasi-physiological and mechanistic explanation that left no room for any ghosts, the faculty of judgement had to be in-built, so to speak, in the process of impression. In this sense, these impressions would already be forms of knowledge, while at the same time being representations of the objects outside. A new problem that appears now is that of bridging the inner space of representations to the outer worldly space, so as to make sure that representations are as accurate as possible. The relation established in this way between impressions and judgement, or knowledge, was made possible by the idea that there was some capacity

of the Mind, that Descartes helped philosophers believe in, for unmediated knowledge. Specifically, the Mind would be able to know what is before it in an unmediated manner; which in turn implies that the objects before it could be nothing more and nothing less than the very knowledge of themselves. That is, an impression is at the same time knowledge of the impression, and to have an impression is to have an instance of knowledge, a true [and self-justified] belief.

This is indeed a strange mixture of epistemic and non-epistemic elements. From here, one central aspect of Locke's theory of knowledge can be distinguished, which was later partially taken by Kant: It is the fact that it attempted to give an answer to the sceptic's question by means of a causal explanation of how a person acquires knowledge of the world outside. In doing this, a theory of knowledge is effectively running together the problem of justification and the problem of explanation. But what is the relation between an explanation of how someone acquires knowledge and a justification of why that knowledge is correct? There must be some relation; nevertheless, it seems a mistake to think that the second can be exhausted by the first. As Rorty puts it,

a claim to knowledge is a claim to have justified belief, and that is rarely the case that we appeal to the proper functioning of our organism as a *justification*. Granted that we sometimes justify a belief by saying, for example, "I have good eyes," why should we think that chronological or compositional "relations between ideas," conceived of as *events* in inner space, could tell us about the logical relations between *propositions*? (1979, p.141)

This is a mistake that Sellars has characterised as "of a piece with the so-called naturalistic fallacy in ethics" (Sellars, 1956, p.19), in that it is the result of trying to mix two mutually irreducible language games, using the elements of one to analyse the elements of the other "without remainder" (ibid.).

According to Rorty, Kant partially refuted this idea, as suggested by his well known statement "intuitions without concepts are blind". A new kind of representation—i.e., *concepts*—was needed for making sense of the stream of experience—i.e., *intuitions*—given that he noticed that intuitions on their own could not constitute any knowledge

whatsoever. Concepts and intuitions would then be put together in a process of synthesis which finally allowed for the emergence of knowledge. In doing this, he helped the problem of how impressions would at the same time be knowledge of those very same impressions to disappear. And it did so, not because it was solved in any way, but rather because it was dissolved; that is, it ceased to be a problem. Its very formulation was seen as problematic from the beginning. The postulation of this act of synthesis, in which something from outside of the mechanistic explanation that Locke intended to provide was required, suggests that the objects of human understanding are in fact constituted by the activity of thought.

But Kant's analysis altogether provided some specific sources of certainty, as well as some sources of uncertainty related with fundamental assumptions. The two sources of epistemological certainty are associated with the two types of representations, one coming from the outside and the other from the inside; that is, respectively, intuitions and concepts. But even though one of them has its origin on the outside through the interaction between the external world and the sense organs of the individual, representations of both kinds are *had* in the inner space. It would be once they are both in the Mind, that the activity of thought would *synthesise* them and that propositions could be created. In this respect Rorty argues that, unlike Locke, Kant did not understand knowledge as essentially and primarily being *knowledge of*—acquaintance with objects or entities—but being *knowledge that*—i.e., propositional knowledge. Nevertheless, he still took from Locke and Descartes the project of bridging the inner and outer spaces, and therefore the notion of knowledge as representational:

With Kant, the attempt to formulate a "theory of knowledge" advanced half of the way toward a conception of knowledge as fundamentally "knowing that" rather than "knowing of"—halfway toward a conception of knowing which was *not* modeled on perception. Unfortunately, however, Kant's way of performing the shift still remained within the Cartesian frame of reference; it was still phrased as an answer to the question of how we could get from inner space to outer space. (Rorty, 1979, p.147)

But this step does not affect the drive to find foundations for knowledge; instead, it changes the nature of those foundations. Neither concepts nor intuitions on their own

can compel to belief, because they are still incomplete; they still need to be synthesised. The task of philosophy in this version, that Rorty labels philosophy-as-epistemology, is still to find those representations—now in the form of propositions—which are

so compelling that their accuracy cannot be doubted. These privileged foundations will be the foundations of knowledge, and the discipline which directs us towards them—the theory of knowledge—will be the foundation of culture. The theory of knowledge will be the search for that which compels the mind to belief as soon as it is unveiled. (1979, p.163)

In the next three subchapters I will be discussing some problems with the very notions of concepts and intuitions. If accepting that these notions present those problems and that they should be abandoned, then there is no point in further saying that there is a need for something like synthesis. Now, concepts are usually associated to analytic sentences and to meanings—in what I shall refer to as sources of conceptual certainty—whereas intuitions are usually associated to synthetic a posteriori sentences and to observation—in what I shall refer to as sources of empirical certainty. The analysis in the following two subchapters deals with the work of Quine and Sellars, but is basically Rortian.

6.2 THE ANALYTIC-SYNTHETIC DISTINCTION

The first source of epistemological certainty I will discuss is that given by analytic truths, as postulated by Kant. Quine describes them as follows:

Kant conceived of an analytic statement as one that attributes to its subject no more than is already conceptually contained in the subject. This formulation has two shortcomings: it limits itself to statements of subject-predicate form, and it appeals to a notion of containment which is left at a metaphorical level. But Kant's intent, evident more from the use he makes of the notion of analyticity than from his definition of it, can be restated

thus: a statement is analytic when it is true by virtue of meanings and independently of fact. (Quine, 1953a, pp. 20-21)

Analytic judgements have already appeared in the discussion of Ulrich's CSH, in section 2.2.1. The example given then was "a triangle has three sides". It would be analytic because presumably it is already contained in the *concept* of triangle to have three sides; in other words, that is part of the meaning of the term *triangle*. The idea of analyticity is related to Kant's *concepts* which, as already mentioned, form part of the scheme with which humans would constitute the world.

Analytic truths might be a source of certainty in that only knowledge of a language, or its meanings, is needed for producing them; for example, knowledge of the English language to say "a triangle has three sides". A systematic form of inquiry—analysis—might even be developed to get to other truths starting from some set of basic analytic ones. And everybody who has something to say speaks a language, and simply speaking a language already entitles one to make true analytic judgements independently of anything else. At least this is how the argument goes, an argument that Quine has sought to undermine.

6.2.1 Meanings, Synonymy, and Analyticity

Quine wrote his essay *Two Dogmas of Empiricism* as an attack on both reductionism and the analytic-synthetic distinction, which he regarded as the two dogmas of empiricism. If his attack is right, then, it should produce, as he says, "a blurring of the supposed boundary between speculative metaphysics and natural science", and a "shift towards pragmatism" (1953a, p.20). His strategy can be outlined as follows: Firstly, arguing that meaning is not the same as extension or naming, he reduces the problem of meaning to that of synonymy; secondly, he looks at some proposals for making sense of the notion of synonymy, rejecting them all as inappropriate for the purpose of bringing light to this rather obscure notion; and thirdly, after having claimed that analytic judgements cannot be really distinguished from synthetic ones, he presents a positive

conclusion represented by his holistic view of knowledge.

Here I will only quickly review the possibility of using a notion like synonymy for deriving from it a kind of judgements that can give us epistemological certainty of a conceptual sort, and then will comment on the positive view of knowledge proposed by Quine. He starts by distinguishing logical truths from the other forms of analytic statements. The former only depend on the meaning of logical connectors, as in "no unmarried man is married", which remains true for any and all interpretations of "man" and "married". The latter, instead, would also depend on the meaning of the words other than the logical connectors, as in "no bachelor is married". This sentence is said to be true because part of the meaning of being a bachelor is being married; and more explicitly, "bachelor" is said to be a synonym of "unmarried man". For Quine there is no problem with the analyticity of logical truths³⁹; however, as his qualms are with the very idea of meaning and they do not depend on meaning, the target of his argument is the other type.

The first proposal for understanding analyticity that Quine considers is Carnap's idea that a statement is analytic if it is true under every possible state description. A state description is a set of atomic statements describing the state of the world, which have been assigned values of truth or falseness. The idea is that one state description would be one way the world could possibly be without logical contradiction—I am married, and my jumper is blue, and today is a sunny day, and so on—and analytic statements would be those whose truth value do not depend on the state of the world. The problem with this proposal, as Quine sees it, is that atomic statements like "John is married" and "John is a bachelor" could be assigned truth values simultaneously in a state description and therefore the original statement would turn out to be synthetic rather than analytic. But someone could say that they cannot possibly be assigned truth values simultaneously for they are not only not independent, but furthermore they are linked to each other in such way that if one is true the other is false. But then the question would be, how does one know that they are linked in such a way? The answer could appeal to some notion of meaning, but that would be to go back where we started (ibid., p.23).

³⁹ Let us notice that accepting "logical truths" as analytic implies that one accepts that they cannot possibly be influenced by other beliefs about *the world*. This would still have to be argued, though, but it is out of the scope of this discussion.

A second proposal is the one that relates synonymy to definition. A bachelor is, by definition, the proposals suggests, an unmarried man. When one deals with an artificial language, designed for some particular purpose, one might refer to the definitions imposed by the designer of the language to establish some sort of synonymy. The problem arises for the rest of languages, in that in them to state a definition would not be so much a declaration as an assertion, already resting on some previous notion of synonymy as embedded in the use of the terms. This way the lexicographer does not so much impose a definition by authority as describe the use of a word (see pp.24-27).

The third proposal examined is the one that stipulates that synonym terms are those which can be interchanged in every possible expression in which they do or might occur, without producing in them any change in truth value. The problem with this proposal is, Quine argues, that it is simply not enough for synonymy, for the only requirement for two general terms to be interchangeable is that they have the same extension—that they refer to the same objects in the world—and not necessarily the same meaning or intension. To say that some general terms A and B have the same extension is to say

(i) All and only As are Bs.

What would guarantee that A and B are synonyms is not that (i) be true, but that it be so by virtue of the meanings of A and B; that is, that (i) be analytic. There might be some further attempts to specify this, for example by using

(ii) Necessarily all and only As are Bs.

The problem is that any understanding of the newly introduced expression "necessarily" is already presupposing a notion of analyticity. All this means, then, that to postulate interchangeability as an explanation of synonymy is to have already appealed to a previous understanding of analyticity (pp.27-32). And a similar argument can be given for the case of semantic rules, rules specified for an artificial language (pp.32-37).

His conclusion, then, is that because it is obvious that the truth of a statement depends

on both language and facts,

one is tempted to suppose in general that the truth of a statement is somehow analyzable into a linguistic component and a factual component. Given this supposition, it next seems reasonable that in some statements the factual component should be null; and these are the analytic statements. But, for all its a priori reasonableness, a boundary between analytic and synthetic simply has not been drawn. That there is such a distinction to be drawn at all is an unempirical dogma of empiricists, a metaphysical article of faith. (pp.36-37)

As Rorty puts it, blurring the analytic-synthetic distinction is equivalent to not knowing how to tell whether each act of creation and modification of our knowledge is to be taken as a response "to the compulsion of 'language' rather than 'experience'" (1979, p.169). Quine's attack on analyticity is also an attack on meaning as an entity, or what he has described as the myth in semantics of a museum in which the exhibits are meanings and the labels words. Different sets of labels would simply represent different languages (see Quine, 1969). But the problem arises as soon as one tries to disentangle the contributions of meaning and fact in one's belief system.

6.2.2 Holism and Verification

As the title of Quine's essay announced, it is actually two dogmas that he is after. The analytic-synthetic distinction is only one of them, and the other one is reductionism. Reductionism refers to the doctrine that states that any of our statements should be, in principle, reducible to a finite set of statements representing immediate experience; that is, expressed in sense-datum language or something similar. To understand the connection between reductionism and the analytic-synthetic distinction it is important to see that the reducibility of a statement to immediate experience suggests that a way of specifying the meaning of a sentence—this time not of a term—is to determine the statements in sense datum language to which it is reducible. Given that agreement with

sense data is supposed to be the ultimate criteria in empiricism for testing or verifying the truth of a statement, this idea is referred to as the verification theory of meaning. A notion of synonymy might be derived from here, and it would be a property of the relation between two [or more] statements when they are reducible to exactly the same set of statements of immediate experience in sense datum language. This way, to accept a reductionist account of meaning and verification is to salvage some notion of meaning, and with it synonymy and the synthetic-analytic distinction.

The attack on reductionism and on the positivist project has a long history in philosophy, and it is not my purpose to recreate all the arguments involved. Quine's, in particular, is linked to the dismissal of analyticity, and he describes this link as follows (1953a, p.41):

As long as it is taken to be significant in general to speak of the confirmation and infirmation of a statement, it seems significant to speak also of a limiting kind of statement which is vacuously confirmed, *ipso facto*, come what may; and such a statement is analytic.

By dropping both the dogma of the analytic-synthetic distinction and the dogma of reductionism, no statement is allowed to hold "come what may" by virtue of meaning. That is, no conceptual certainty can be derived from any entity such as *meanings*, and any of one's beliefs can be changed to re-accommodate the total system.

The positive picture presented by Quine, as a consequence of rejecting the two dogmas, is a holistic one: No single sentence is to be linked in a unique way to experience, or stimuli, or sense data; rather, they are logically linked with each other forming a net whose edges are only fastened by experience. It is the totality of one's belief system that has to face experience, and any tension in the system arising from it will trigger changes that can occur in any place in the net. Furthermore, any possibility of distinguishing between on the one hand terms or sentences which will be treated as posits, postulated just because they are convenient, and on the other hand terms or sentences which will be treated as real or factual, is rejected:

The issue over there being classes [in mathematics] seems more a question

of convenient conceptual scheme; the issue over there being centaurs, or brick houses on Elm Street, seems more a question of fact. But I have been urging that this difference is only one of degree, and that it turns upon our vaguely pragmatic inclination to adjust one strand of the fabric of science rather than another in accommodating some particular recalcitrant experience. (p.46)

This way, Quine suggests that individual terms or statements cannot be compared with reality for confirmation or testing, but all of our knowledge; as he puts it, "the unit of empirical significance is the whole of science" (p.42). This view of knowledge is profoundly holistic in that any sentence in the net of one's belief system depends on the other ones in such a way that any change affecting one will affect many others as well.

6.3 THE MYTH OF THE GIVEN

Quine's attack on the two dogmas of empiricism led him to propose a holistic view of knowledge. A knowledge or belief system could be seen, in his proposal, as a web limited by and taking the stresses imposed on it by immediate experience. Given this, it is correct to say that Quine blurred the distinction between matters of fact and matters of convenience of conceptual scheme. However, this is only true to a certain extent: In the distinction between experience and beliefs that is present in his view of science and knowledge, a similar trace of the fact-convenience distinction can be seen. Granting that any belief can be changed if necessary to accommodate for tensions in the web, that "no particular experiences are linked with any particular statements in the interior of the field" (1953a, p.43), and that the distinction between those statements more centrally located and those closer to the edges where experience occurs is only a "matter of degree", one can ask now about what that experience is, and how it interacts with the beliefs in the periphery, and about what it means to have experienced something. As I will attempt to show in this subchapter, following Wilfrid Sellars, any attempt to give experience some epistemic status, with the corresponding conferred rights of playing a role in justification, is problematic.

Thus, Quine states, for example, that "even a statement very close to the periphery can be held true in the face of recalcitrant evidence by pleading hallucination or by amending certain statements of the kind called logical laws" (p.43). It is [recalcitrant] experience which produces some tension within one's belief system, but the same experience or evidence may give rise to the belief of having hallucinated as well as to that of there being some object in the world that corresponds to one's sight. This experience is given; and it affects one's beliefs but is not affected by them, for otherwise it would still be part of our belief system. But even though it is outside actually bordering with it—it would still have to be able to play a justificatory function in relation to sentences such as "it looked X to me", thus having some epistemic character. With this possibility, as Rorty has expressed it, Quine has opened the door for a "distinction between truth by convenience and truth by correspondence, so to speak, rather than the old positivist distinction between truth by convention and truth confirmed by sensory experience" (1979, pp.194-195). That is, that boundary of experience can still act as a source of empirical certainty for some kind of very basic epistemic entities—the elements of experience—giving rise to some form of truth by correspondence. Further away from the experiential border, changes in our beliefs can be made by convenience.

If one can have a pure form of knowledge of at least one's sensing of the world, of one's experience, a form of knowledge not influenced by any beliefs in one's knowledge system, and which could be incorrigible, then one would have achieved empirical certainty. Further knowledge, although perhaps more fallible, might be constructed from this point onwards. This empirically certain knowledge would play the role of being a foundation for knowledge; but in order to do this, it has to be *given* to the mind. To this idea of *givenness* I now turn.

6.3.1 The Given

Wilfrid Sellars attacks the idea of givenness in his argument against what he labels the "Myth of the Given", mainly developed in his essay titled *Empiricism and the Philosophy of Mind* (1956). The problem he deals with is the postulated existence of something which is given to the mind by being incorrigibly knowable by it, independently of any other knowledge. What is given to the mind is supposed to be that about which one can be in neither ignorance nor error. Because of this, the given would be a source of empirical certainty and a foundation for knowledge.

There is clearly a connection between the Myth of the Given and the idea of philosophy-as-epistemology described by Rorty, as apparent in Sellars' remarks that "the point of the epistemological category of the given is, presumably, to explicate the idea that empirical knowledge rests on a 'foundation' of non-inferential knowledge of matter of fact" (1956, p.15). Sellars' conclusion is that there cannot be such a thing as the given, and therefore that it is ill-suited as a foundation of knowledge. Instead, he argues that "empirical knowledge, like its sophisticated extension, science, is rational, not because it has a foundation but because it is a self-correcting enterprise which can put any claim in jeopardy, though not all at once" (p.79)

The most obvious candidates for *the given* are empirical and observational forms of knowledge very closely related to, in Quine's terms, the edge of one's belief system, the place where it borders with experience and sensory stimulation. To understand Sellars' attack on the Myth of the Given it may be useful to bear in mind the process through which one presumably acquires those beliefs about the world: First, the world of objects would produce sensations in us by stimulating our sense organs; then, those sensations would produce non-inferential beliefs in us, which then in turn produce other inferential beliefs. If those non-inferential beliefs are given, and therefore at the same time are indubitable and do not depend on anything acquired or learnt, then they can constitute foundations for knowledge.

But then how is one to understand the expressions "produce" in the above sentence? In the first case—the relation between the world and our sensations—it is accepted that there is a causal relation and not an epistemic one; to think otherwise would be to make the mistake of believing that the world speaks a language⁴⁰, or that it "splits itself up, on its own initiative, into sentence-shaped chunks called 'facts'" (Rorty, 1989b, p.5). About the third one—the relation between our non-inferential and our inferential beliefs—however, it is accepted that the relation is logical and normative, or one of justification "in the space of reasons". The problem appears with the second relation. Relations between events can be causal, as when some event in the world causes some event in our sense organs, or even in our beliefs. Relations between propositions—and a belief can be said to be a proposition held true—belong to the "space of reasons" and justification, as when one infers some propositions from some others, or justifies one by invoking others.

6.3.2 Explanation and Justification

The problem, as Sellars points out, appears when one confuses

the idea that there are certain inner episodes—e.g. sensations of red or of C# which can occur to human beings (and to brutes) without any prior process of learning or concept formation

with

the idea that there are certain inner episodes which are the non-inferential knowings that certain items are, for example, red or C# (1956, pp.21-22).

This is a distinction between sensations and thoughts, and Sellars stipulates that sensations cannot play a direct role in justification. They can, and very usually do, play a role in the creation of beliefs about, for instance, what sorts of things redness or pain are, or about other related issues. But, as Rorty has argued, they are neither sufficient—for to have a sensation is not to have any kind of knowledge—nor necessary—for a blind person can still know many things about redness (Rorty, 1979, p.184). Regardless

 40 Let us recall, for instance, Galileo's famous remark that nature speaks the language of mathematics.

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of whether one wants to understand thoughts as inner episodes, it is important to stress from Sellars' argument that they are conceptual—in that they involve concepts—and cannot be separated from the process of learning those concepts. It is important to clarify that he does not intend to deny that there are beliefs which are non-inferential. Instead, by distinguishing them from sensations he denies that they can be had independently from any prior learning and that their validity can be justified by the very act of having them.

Another possibility would be to consider the sensing of sense-contents as knowledge of facts; for instance, knowledge that something is a red and triangular sense-content. In this case, having a sensation—a sense-content—is equated with having a [true] belief about having that sense-content, which in ordinary language would be a true belief about how something looks. Or, as in other proposals, talk of sense-data may be declared redundant, and only talk of looks considered necessary. In either case the idea would be that one can be mistaken about whether something is, say, red, but one cannot be mistaken about whether it *looks* red to one (a red sense-content would be equivalent to something looking red to one). This way, *lookings* would be established as logically prior to beings in that the latter would require an inference from, among other things, the former. That is, the assertion "that is green" would be logically dependent on the assertion "that looks green". This proposal is paradigmatically Cartesian in the sense that first there is incorrigible and uninfluenced knowledge of one's mind ("that looks green"), and then from it other more unreliable forms of knowledge can be inferred (such as "that is green"). But the first problem—that of having at least some kind of foundational incorrigible knowledge—is overcome: If sense-contents are particulars, then "X looks ϕ to S" is knowledge of facts⁴¹ (Sellars, 1956, pp.32-36).

Sellars, however, proposes a way of understanding the talk of *looks* which does not appeal to entities directly knowable to the mind, namely the *lookings*. First, there is the problem of being able to report "X looks ϕ to me" without having previously acquired mastery of the word ϕ , and therefore of talk of "X is ϕ ". That is, Sellars suggests that the logical or conceptual relation is actually the other way around: It is talk of "X is ϕ " which is logically prior to talk of "X looks ϕ to me". His positive proposal in this

⁴¹ It is possible to say "I know that X looks \$\phi\$ to S".

respect consists in the claim that "X looks ϕ " plays a similar role as "X is ϕ ", except that in the former case the speaker has withheld her/his endorsement of the assertion, whereas in the latter s/he is endorsing it. This, in turn, requires from the speaker to have previously learnt that under certain conditions some reports of the form "X is ϕ " are unreliable, and therefore their endorsement should be withheld. It is then a problem of certainty, with "X merely looks ϕ " being at the other end, in which case the speaker would be suggesting "X is not ϕ " while recognising that if the conditions had been right s/he would have suggested the opposite⁴². And just what the right conditions are for making reliable reports depends on other beliefs and theories one holds true.

This way, the characterisation of talk of lookings as dependent on talk of beings and their distinction in terms of certainty takes Sellars to one more important claim:

To say that a certain experience is *seeing that* something is the case, is to do more than to describe the experience. It is to characterize it as, so to speak, making an assertion or claim, and (...) to *endorse* that claim. (1956, p.39)

This decision of whether to endorse the claim actually locates it in what Sellars calls the logical space of reasons, and makes it depend on other beliefs for its justification. This way, "one couldn't have observational knowledge of any fact unless one knew many other things as well" (p.75). This is not to say that observational statements are inferential; instead it is that even though non-inferential they are not justified on their own—which is something that is required from a *foundation* for knowledge—and form part of the game of justification. The general point is put by Sellars as follows:

The essential point is that in characterizing an episode or state as that of *knowing* we are not giving an empirical description of that episode or state; we are placing it in the logical space of reasons, of justifying and being able to justify what one says. (p.76)

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direct talk of the world.

⁴² Let us notice that an analogy can be drawn to talk of opinions and views. To say "it is my opinion/view that S" suggests that matters have not been settled in that respect in the community to which one is speaking, or that some in one's audience might not agree with what one says. It opens up the space for talk of disagreements and for further inquiry. In that sense, talk of views is conceptually dependent on

To end this section, let me now point at a conclusion that can be derived from Sellars' attack on the Myth of the Given. If one is to reject the idea that there are self-justified beliefs—the given—then no form of empirical certainty can be derived from statements like "X looks φ to me" in a foundational manner. Acceptance of the veracity of any observational statements depends on, among other things, previously acquired beliefs about what the standard conditions for reliable reports are, and on the acceptance of the validity of the conceptualisation of φ (and X). To generally believe in most of the empirical reports means, then, that *so far* we have found no reason to doubt them, and that nobody has yet given an explanation by means of which they should be considered unreliable, or confused. We hesitate about believing them sometimes, no doubt, and then turn to a different kind of talk, as in "s/he says s/he saw that A" or "it looks like A" .

Sellars' attack has been particularly focused on

the idea that there is, indeed there must be, a structure of matter of fact such that (a) each fact can not only be non-inferentially known to be the case, but presupposes no other knowledge either of particular matter of fact, or of general truths; and (b) such that the noninferential knowledge of facts belonging to this structure constitutes the ultimate court of appeals for all factual claims—particular and general—about the world. (Sellars, 1956, pp. 68-69)

The argument has indeed undermined the possibility of having some kind of foundational knowledge tied to the empirical, and therefore of having some kind of inescapable knowledge related to a source of empirical certainty.

6.4 THE SCHEME-CONTENT DISTINCTION

A different though related development is Donald Davidson's attack on what he has called the scheme-content distinction. As mentioned at the beginning of this chapter, it

is recognised that Davidson's philosophy has finally established a view of knowledge that is neither reductionist nor based on any version of the idea of the given. First, let us recall that by removing the divide between synthetic and analytic statements, Quine blurred the distinction between matters of fact and matters of convenience as criteria in the process of adjustment of one's belief system. Another distinction was left, however: that between experience and the belief system which copes with it; this corresponds to one manifestation of what Davidson calls the scheme-content distinction. In this sense, the connection with Sellars' critique is evident (but it has only recently been acknowledged by Davidson, see 2001).

The scheme-content distinction is based on the idea that there are two types of entities which participate in the production of knowledge, in a kind of synthesis. In the opening paragraph to *On the Very Idea of a Conceptual Scheme*, Davidson explains this idea of a scheme:

Conceptual schemes, we are told, are ways of organizing experience; they are systems of categories that give form to the data of sensation; they are points of view from which individuals, cultures, or periods survey the passing scene. There may be no translating from one scheme to another, in which case the beliefs, desires, hopes, and bits of knowledge that characterize one person have no true counterparts for the subscriber to another scheme. Reality itself is relative to a scheme: what counts as real in one system may not in another. (1974a, p.183)

The task he sets himself in this essay is to examine whether the different versions of the idea of a conceptual scheme make sense. Talk of conceptual schemes is usually associated with talk of the actual or potential existence of a plurality of them. These different conceptual schemes would be incompatible with each other, although they would be compatible with reality in some versions, or with our experience in some other versions.

6.4.1 Empirical Content and Conceptual Scheme

Although the title of his essay suggests that his is an attack on the idea of conceptual scheme, it is actually an attack on the distinction between it and empirical content—what he calls the scheme-content distinction—that casts doubt on both ideas. As he puts it, "content and scheme (...) came as a pair; we can let them go together" (Davidson, 1988, p.165). The blurring of the analytic-synthetic distinction, in the way that Quine had used it, gave empirical content to all beliefs in one's knowledge system, although in a collective or "corporate" way. That is, from the start Quine took the Kantian idea that the validity of our beliefs is to be justified either empirically or analytically depending on the type of statement⁴³, and then simply argued against the second of these options leaving all statements in the empirically-justifiable category, even if in a non-reductionist way. However, by casting doubt on this, Davidson is effectively rejecting empiricism altogether:

I want to urge that this second dualism of scheme and content, of organizing system and something waiting to be organized, cannot be made intelligible and defensible. It is itself a dogma of empiricism, the third dogma. The third, and perhaps the last, for if we give it up it is not clear that there is anything distinctive left to call empiricism. (1974a, p.189)

A first clarification to make is that schemes are to be associated with languages. The idea is that it does not make much sense to think of the mind as making use of the categories imposed by its scheme, while at the same time handling a language with its own categories. I take this remark by Davidson as something learnt from the linguistic turn in philosophy; and particularly the change of thinking in philosophy from *ideas* as the central entities of the analysis, to *sentences* or linguistic structures in general.

6.4.2 Schemes as Organising

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⁴³ Except for synthetic a priori judgements, which would not be justifiable and would have to be assumed.

Davidson recognises two main general kinds of functions that have usually been attributed to conceptual schemes in the literature: that of organising (systematising, dividing up, putting into categories, etc.) something, and that of fitting (predicting, accounting for, facing, coping with, etc.) something. That *something* which is organised or fitted could also be put into two general categories: reality (the world, nature, etc.), and experience (sensations, sense-data, the given, stimuli, surface irritations, etc.)

The main problem with the idea of organising, according to Davidson, is that one cannot organise a single object, unless it consists of many objects itself. One can only organise a plurality of things. If reality, and experience, are to be taken as single things, then they simply cannot be organised: "If you are told not to organize the shoes and shirts [in a closet], but the closet itself, you would be bewildered" (1974a, p.192). And then, if one takes them as consisting of a multitude of things, then this means that they have already been individuated somehow before language could have the opportunity to organise them. But this individuation is precisely the task that language or scheme were supposed to carry out!

Talk of a language as organising something makes sense, perhaps, if one can already account for the individual objects which are to be organised; that is, if there is another language available which individuates those objects in a way in which the other language does not (see Kraut, 1986). So for instance, to take Whorf's classic example, it is possible that in Eskimo language there exist many more words for kinds of snow than in English language. For the sake of the argument, let us suppose that an Eskimo translator notices that native English speakers trying to learn Eskimo cannot normally find accurate ways of describing in English the differences between those Eskimo words, and that when they finally learn to properly use them, they use the Eskimo words even if speaking in English. For her/him, English language might look as having put into a few categories all those different kinds of snow; as dividing up experience of different kinds of snow into those few categories. And along the line of psychological explanations currently in fashion, s/he might even say that English speakers choose from all the stimuli or the information available those bits that are in agreement with their interests, expectations, or whatever is the case. But this is not what was expected from schemes. The whole idea has changed, for it is not reality that is being organised,

but reality as described in a different language. It ceases to be a relation between a language and reality, and becomes a relation between languages. With some kind of a comprehensive and extensive *master* language (that of the psychologists, for instance, setting up experiments to find out about the way people *choose* bits of stimuli or of information from the environment) one can say which bits have been chosen by somebody in a situation and which have not; which have been included in his/her analysis and which have been left out.

All this is fine, but one shall not think that the master language used to describe a particular situation (like the psychologists' experiment) is the language of reality. The problem is, how does one know that there is a plurality of things in nature if not by describing that plurality using some language available? As Rorty puts it, in discussing Kant's distinction between intuitions and concepts and his idea of synthesis,

it is not an evident pre-analytic fact that such a manifold exists, how can we use the claim that sensibility presents us with a manifold as a premise? How, in other words, do we know that a manifold which cannot be represented as a manifold *is* a manifold? More generally, if we are going to argue that we can only be conscious of synthesized intuitions, how do we get information about intuitions priori to synthesis? How, for instance, do we know that there is more than one of them? (1979, p.154)

6.4.3 Schemes as Fitting

Language, or schemes, understood as fitting reality present a different picture. A first difference is that it is not terms, as in the previous case, but whole sentences which is the subject matter. It is only sentences which can fit, predict, cope with, or match either reality or experience. This time, Davidson argues that fitting experience, or the evidence, or reality, or the facts, adds nothing new to the concept of *being true*. That is, to say of some sentences that they fit reality or experience would be the same as saying that they are true. But what in experience is it that can make a sentence, theory, or

whatever is the case true? Davidson is emphatic:

Nothing, however, no *thing*, makes sentences and theories true: not experience, not surface irritations, not the world, can make a sentence true. *That* experience takes a certain course, that our skin is warmed or punctured, that the universe is finite, these facts, if we like to talk that way, make sentences or theories true. But this point is put better without mention of facts. The sentence 'My skin is warm' is true if and only if my skin is warm. Here there is no reference to a fact, a world, an experience, or a piece of evidence. (1974a, p.194)

At least two ideas can be derived from the quotation above. Firstly, Davidson again deals here with the problem of assigning epistemic properties to objects which are nonpropositional in character. It is neither reality nor experience—no thing—which can make sentences true, for neither reality nor experience are propositional; that is, they do not speak a language, or are made up of "sentence-shaped chunks" as Rorty would put it. The only thing that can make the sentence "my skin is warm" true, is that my skin is warm. But actually that is not a thing: It is not skin, it is not warmth, it is not any other thing. Secondly, it is not some particular set of sentences—for instance, foundational sense-data sentences, or observational sentences—which make the rest of them true: The sentence "the universe is finite" is true if and only if the universe is finite; just as the sentence "Bardot is good" is true if and only if Bardot is good (see for instance Davidson, 1967). Now, from here one can see that questions like "are there things or facts in reality to which the sentences 'Bardot is good' and 'the universe is finite' correspond?" are meaningless. There is no need for such a thing as a fact in order for them to be true. All that is needed is that Bardot be good and that the universe be finite. This does not make any reference to any form of fitting with things.

6.4.4 Reality, Knowledge, and Representations

As mentioned before, Davidson's work continues along the line of Quine's teachings, but detecting and further eliminating the distinction between scheme and content. Davidson's own words are worth quoting in full:

In my view, erasing the line between the analytic and the synthetic saved philosophy of language as a serious subject by showing how it could be pursued without what there cannot be: determinate meanings. I now suggest also giving up the distinction between observation sentences and the rest. (....) Accordingly, I suggest we give up the idea that meaning or knowledge is grounded on something that counts as an ultimate source of evidence. (1983, p.313)

To abandon an empiricist doctrine, as Davidson does, is not to accept the claim that reality, the world, etc. do not have any influence on what we say about them. The point is that, as Sellars had also argued, the relation is causal and not epistemic:

The relation between a sensation and a belief cannot be logical since sensations are not beliefs or other propositional attitudes. What then is the relation? The answer is, I think, obvious: the relation is causal. Sensations cause some beliefs and in *this* sense are the basis or ground of those beliefs. But a causal explanation of a belief does not show how or why the belief is justified. (Davidson, 1988, p.311)

No doubt meaning and knowledge depend on experience, and experience ultimately on sensation. But this is the 'depend' of causality, not of evidence or justification. (pp.313-314)

Our beliefs do not, then, swing free from reality: They are in direct touch with it. Furthermore, observational sentences (those more closely causally connected with the production of our beliefs) are *usually* good for basing other claims on them, as they are *usually* true. That is, they seem to cohere with each other in many ways, and that is part of their justification. This makes us be more certain about their truth, but this is not what I called epistemological certainty. And they are not inescapable: "The beliefs that

are delivered by the senses are always open to revision, in the light of further perceptual experience, in the light of what we remember, in the light of our general knowledge of how the world works" (Davidson, 1999b, p.106). Some caution about this sentence is necessary: The perhaps unfortunate expression *perceptual experience* should be taken to refer to further sets of perceptual or observational beliefs, or beliefs caused very directly by the world, and not as some non-propositional or non-epistemic entities. Otherwise, we are back where Quine was; that is, postulating intermediaries between our beliefs and the world. Importantly, any revisions made in our observational sentences, if consistent, may produce in us in the long run a change in the kind of observational sentences that are caused or triggered in us by the world.

The view of knowledge that results from the adoption of this deep and thorough holism is one that takes up the implications of rejecting a correspondence notion of truth. In fact, as Davidson has argued, truth appears here as a basic notion that cannot be analysed into anything like correspondence, coherence, consensus (by the knowledgeable, or in an ideal speech situation, etc.), or any other possibility (see Davidson, 1990). But, as I will explain in the next chapter, it still remains a concept we cannot do away with.

6.5 INESCAPABILITY AND KNOWLEDGE IMPOSITION

The incursion in the previous subchapters into the terrain of philosophy of language was mainly intended to show that it makes no sense to think of knowledge as having or needing foundations. The objective behind all this, however, was to examine the requirements formulated before for preventing knowledge imposition on the people who the critical approaches are supposed to help (e.g., students). This and the next subchapters are devoted to this purpose. In the present one, I will discuss the implications of the argument against foundationalism presented above, for the requirement of inescapability. Although some remarks have already been made in this

respect, it is important to have now a more detailed and integrated view of this issue.

Inescapability, I argued in chapter 5, refers to the idea that a proper form of inquiry will necessarily lead the inquirers (e.g. students) to a certain answer, which is pre-defined by the theory of the critical, and which is given in the form of the source reading(s) of reality. This way, only by asking questions and by allowing an appropriate space for reflection, inquirers would arrive at the same conclusions that the source reading of reality was espousing.

6.5.1 Inescapability of a Single Reading of Reality

In section 5.1.3 I discussed the relation between the *inescapability* requirement and the prevention of knowledge imposition in advocating content-full theories of the critical. The imposition of external knowledge in the form of a target reading of reality—by the media, the politicians, etc.—is prevented by means of its questioning in the light of an alternative source reading. The potential imposition that appears as a problem here is, instead, that of the source reading, as it is to be accepted because criticality is to some extent defined by it.

The remaining question then was whether that requirement of inescapability can be met, and specifically the inescapability of the source reading of reality which is entailed and advocated by the theory of the critical. The morale I wanted to draw from the argument on foundationalism is basically an answer to this question. Foundationalism, let us recall, was the search for ultimate grounds of evidence or proof for knowledge, so that the game of propositions justifying other propositions could reach some end. The idea was to establish the possible ways in which the world or something else could compellingly trigger the production of some instances of knowledge, and for which it would at the same time provide a justification. The problem for inescapability is, of course, about the compulsion in this relation, and the justificatory nature that it should have. The issue is linked to the problem of confusing validity with causality (see section 6.1 above), as the idea of triggering or producing knowledge is not justificatory;

that is, an explanation of the causal process does not in itself justify or refute a sentence or a belief.

Among the approaches reviewed here, the one that I have taken as paradigmatic of advocating content-full theories of the critical, is Freire's (see section 2.2). He, as far as I know, never discussed in any detail the reasons why it should be expected that students—who in his projects are the oppressed—ever had to reach the state of critical consciousness and, for instance, "[get] to an understanding of the role of the "boss", in the context of a certain socioeconomic, political system—[get] to an understanding of the social relations of production, [get] to an understanding of class interests, and so on and so on" (Freire, 1994a, pp.48-49). Freire's theorisation gives some hints about this issue in terms of a teleological view of human nature, as being called towards some state that he calls, perhaps somewhat rhetorically, *humanisation* (see Freire, 1970; also Aronowitz, 1993). The problem, then, is the grounds on which someone can assert and justify, outside of religious circles, this postulated teleological nature, and more specifically the particular view of the final humanised state Freire has argued for.

But in fact, it might be said that Freire did not expect as something inescapable that students achieved critical consciousness straight away. The possibility that they do not come to realise in a straight forward manner what their situation of oppression is, who the oppressor is, what societal structures promote and maintain it, and so on, is acknowledged in Freire. The response is to declare the students alienated, with a submerged consciousness, etc. Inescapability should then be reduced to inescapability under the right conditions, where these right conditions refer to some extent to the state of oppression the students are in. That is, if students are oppressed, this very oppression is theorised by Freire as causing the students to have a submerged consciousness with which they are unable to realise their oppression and the "true causality" behind it. As already suggested, this might be taken as implying that there is some from of circularity in the argument (see Buckingham, 1998). But the circularity would be broken if the arguments of the other are confronted in a direct way, and then refuted. Freire does not do this in his writings, relying for this purpose on the authority of others (e.g. Marx and Marcuse); and because of this, the question still remains one of how to carry out that confrontation without the actual conversation of inquiry having taken place. But it is the [in]validity of some reading of reality, precisely, which can only be established in

those spaces of conversation in which reasons are considered and weighed by those participating. If the classroom is supposed to be one such space, then it cannot be determined in advance of the conversations to take place there what the right or wrong views are.

In practice, a teacher might assume that s/he can anticipate many possible disagreements by her/his students with the knowledge that s/he is passing to them, and know the reasons why those disagreeing are wrong, and that furthermore s/he can also refute any other possible new reasons given against that knowledge. Disagreements are treated in this case as errors, even from before they have actually occurred, which simply means that the students—the teacher's partners in conversation—have been already disqualified from the role of inquirers and potential producers of significantly different new knowledge. For one thing, any refutation or acceptance of any reason in favour of or against any form of knowledge has to be done by each student if direct and immediate knowledge imposition is to be prevented. This becomes an issue specially in those areas in which there is not general widespread agreement, and/or in which for one reason or another students may have some form of advantage over the teacher (e.g., experience, closeness to the topic discussed, etc.).

Apart from this it is also important to point out that a causal explanation of why the students hold certain beliefs cannot be enough as a confirmation or refutation of those beliefs. To think that way would be to mix explanation with justification again, and that is precisely what Sellars' and Davidson's arguments have shown to be incorrect. No doubt aspects of causal explanations are useful for making sense of situations in which people are right or wrong in their beliefs—and, as I shall argue in the next chapter, also for interpretation—but they cannot explain what is wrong or right in any particular belief. This way, an explanation of how someone's consciousness can get submerged or become naïve is not self-sufficient, in that it still has to be based on something outside of that explanation. Specifically it has to rely on an argument that concludes that the beliefs held by that person are wrong, naïve, mythological, or whatever is the case. Once this has happened, or at least once this is assumed, the expressions *submerged* and *naïve* start to make sense in their negative connotations.

6.5.2 Inescapability of Sets of Readings of Reality

As explained in section 5.1.3, when a theory of the critical entails a number of readings of reality but does not advocate any of them, the idea that they form a complete set may be implied in the approach. If this is so, then the set of those source readings will be taken as providing all the possible relevant questions to be asked in a domain of action; and furthermore, from the comparison between them it will be seen that they provide all possible answers to the basic or central epistemological and/or ontological questions concerning that domain.

It might be argued that the scope provided by the theory of the critical in this case will be larger than if only one single source reading were used, and it must certainly be so for most cases. What is taken to be inescapable in this case, however, is the range of possible answers and questions given by the source readings altogether. This simply takes us back to the original problem of inescapability for the case of single source readings of reality, without strictly committing to one answer. But the problem stays the same. In other words, even if the scope is enlarged by the consideration of more than one reading, it may well prove to not be large enough so as to take into account all possible relevant questions and answers. It is in this sense that inescapability of the whole set of source readings is problematic, and that the problem in a strict sense has not been changed.

One point that I want to introduce now, which also applies to advocating content-full theories of the critical, is that of the *cautionary* use of the word truth. With this expression coined by Rorty (1986), he attempted to explain the very simple idea that one of the main uses for the notion of *truth* is that of cautioning us about the possibility that one might still be wrong, even if one's claims and arguments have been accepted by everyone in the community to which one belongs and with whose members one engages in conversations of inquiry (see also Davidson, 1999a). Even though in the very practical terms of the practice of argumentation there is no difference whatsoever between trying to be justified and trying to be truthful, the cautionary use reveals the existence of an actual separation between truth and justification, as in the expression "even though we are well justified, what we are saying might still be false". In some

sense, this implies that other audiences, in different temporal and/or spatial locations, might raise valid objections and questions that one and those in one's community may not be aware of at the moment. The idea of a cautionary use of the notion of truth is very much in accordance with the anti-foundationalist view presented before, as it can be seen as deriving from the latter's suggestion that no once-and-for-all justification can appropriately produce absolute certainty (out of non-epistemic sources of epistemological certainty).

In this context it seems to be particularly important to take into consideration the cautionary use of the notion of truth. The postulation by a critical approach of different readings of reality as potentially valid for a given situation or domain, suggests that in that domain there is no clear consensus as to what knowledge to take as true. But let us further notice that in the light of this lack of consensus about what the appropriate approach is, it seems particularly risky to claim either implicitly or explicitly the completeness of a set of source readings, or the inescapability of the set of answers. That is, that lack of consensus would seem to imply that there are no clear criteria as to what issues, questions, and answers, provide the complete picture about the domain of action in question. And if this is so, one might ask on what grounds it could be claimed that such completeness has been achieved by the set of source readings of reality.

Given the above, it then can be argued that early versions of the Total Systems Intervention methodology (see section 3.4) implied a claim about the completeness of a postulated set of three main systems paradigms in terms of the issues they deal with. This claim was based on the adoption of a meta-theory (Habermas' theorisation on the three types of knowledge constitutive interests), with which it was attempted to explain why there should be three and only three general systems paradigms⁴⁴. In more recent accounts this idea, however, has been abandoned. This way, on the one hand the three paradigm set of source readings has been expanded to include a fourth one, and the meta-methodology that explained the very existence of each paradigm has been dropped (see Jackson, 1999, and 2000). Nevertheless, the suggested use of the methodology itself does not make much room, or at least not too explicitly, for the prospect that possibilities outside the set of source readings might be brought into inquiry by, for

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⁴⁴ Internal subparadigmatic categorisations would also be possible, as in the separation between functionalism and structuralism.

instance, the actors involved in a situation being tackled with TSI⁴⁵. If that is the case, then actors in the situation would not be regarded as possible contributors to the discussion at the level of the methodologies. In the domain of problem solving in particular, it is however unthinkable that actors in situations had not developed, even if only in a casual and informal way, problem solving approaches that reflect parts of their own belief systems. Any use of a pre-defined approach or set of approaches will then overwrite those approaches embedded in the participants' own belief systems, and therefore will be effectively imposed.

6.6 GIVENNESS AND KNOWLEDGE IMPOSITION

In sections 5.1.4 and 5.2.2 I postulated givenness as a requirement to effectively avoid knowledge imposition for those critical approaches with content-empty theories of the critical, regardless of whether they address the problem of validity or the problem of pedagogy. In the discussion of this requirement, it was made clear that in this case the knowledge that potentially might be imposed is not one coming from the theory of the critical itself, but from society, or its social institutions, or the dominant groups in power, or the mass media, or the scientific experts, etc. More specifically, if the reality-content of whatever is subjected to discussion in the classroom is not transparently given, if the identification of the possible questions and answers about reality is not commonsensical and independent from other theories or sets of beliefs that one may have, then a theory of the critical falling in either of the categories mentioned above would fall short of providing the necessary intellectual tools and knowledge for revealing instances of knowledge imposition.

The reason why I labelled this requirement givenness can be seen more clearly now.

⁴⁵ Jackson has said that *at least* the rationales of the four systems paradigms should be used to reflect on any situation being studied and the use of methodologies in it. That "at least" expression leaves the room open for other belief systems to enter the conversation. It is my opinion that it needs to be made clearer how that would affect practice.

Sellars' discussion of the Myth of the Given was an argument against the idea that there might be some kind of knowledge which could be had independently of any other beliefs, and which in some way could be then taken as a foundation for knowledge—because, additionally, it would be incorrigible. For the purpose of this subchapter it is important to point out that it is its independence from all other beliefs which would guarantee that knowledge of this kind cannot be on the one hand theoretical, and on the other influenced by external causes other than the object of knowledge itself. By not being theoretical, it would not depend on any form of expertise; by not being externally influenced, it could not be imposed. And this is exactly what I argued in the previous chapter that was required for critical approaches not committing to any form of content, to effectively prevent imposition.

As the reader might expect, the conclusion that I draw mainly from the arguments by Sellars and Davidson about the possibility of givenness is that it is simply not possible at all. In what follows, however, I will examine what the rejection of givenness implies for the approaches for which this requirement was necessary.

6.6.1 Givenness and The System Idea

One approach that I have taken as paradigmatic of content-empty theories of the critical is Werner Ulrich's CSH, as this approach demands from one to make explicit a number of choices made in any particular design of a social system, while at the same time it does not give content to what the options to choose from might be.

In particular, the problem that is pointed out by the rejection of givenness consists in the fact that knowledge of what the options are—and which ones one has chosen in the design of any social system—does not come in a straightforward manner. For one thing, what has been argued in the previous subchapters suggests that the knowledge expressed in the identification of the options for answering a particular critical question—like those asked by CSH—is in some sense theoretical, in that it supposes other beliefs that support and are supported by it. That theory cannot be non-inferential,

let alone *given*. If one's knowledge of reality is limited, incomplete, partial, and so on, and should be problematised, then the situation does not improve when one turns to consider those limits, that incompleteness, that partiality, and so on; that is, when what is in question is one's knowledge of the limitations of one's knowledge. And then one may as well ask: But is not this very fact of *limitation* what has driven some authors, following Kant, to problematise knowledge of reality and to try to specify those limits? The logic of the project would take one to then problematise the very knowledge of those limits.

In the case of CSH, for instance, one of the twelve categories determining the boundary judgements according to Ulrich, is that of the clients of the social system (see section 3.1). One's knowledge of who is affected, either negatively or positively, by any particular social system, however, is not based on something given, and which can be known in an unmediated manner; and thus the determination of who may actually be affected is as problematic as anything else. And then, the questioning might follow, how is one to know whether one's categorisations of people or groups as included in or excluded from the workings of a social system design are appropriate? Surely, one's categorisations will not be independent from, among other things, one's very beliefs about how the social system should be designed, or from one's beliefs about how it internally works. In practice, this can be seen in the following example: Feminists have helped the rest of us realise the extent to which women have been excluded in many situations, in contexts for which it simply had not occurred to us that gender was a significant variable—and for which therefore women and men would not have occurred to us as possible clients separately. CSH could not have assisted us on this, and it is precisely for this reason that on its own it is not enough as an instrument for critique and should be aided by other forms of theory. It is in this sense that the very beliefs one has about what the system is—what its boundaries are, and so on—and what it should be, both determine and are determined by one's categorisation of the range of possible clients among which one has *chosen* some—e.g., including men and excluding women. Critical knowledge is still theoretical knowledge, which implies some expertise—in that any instantiation is a manifestation of knowledge of many other things—and which can be imposed.

In general, all this implies that if one does not hold other beliefs that would allow one to

identify some possible answers as possibilities for consideration, one may not even realise that one is "making those choices" of answers. The assumption that that knowledge is straightforward and commonsensical may be seen as deriving from the idea that what one has done is make a choice; and any choice depends in turn on the idea that the elements or aspects in the set from which one will choose are already there, given, in an unproblematic way. One possible way of referring to that act of choosing is by making use of the *system* idea. Here, a choice is seen as a boundary that separates the inside from the outside, what is included in the system from what is being left out. The idea of boundary critique that Ulrich has advanced is a problematisation of the system boundary, enabling a critique of any reification of the boundary as fixed, given. The problem he is addressing is one of where the boundary is and ought to be drawn, as is clear from the fact that the kind of critique he is looking for is a boundary critique. The twelve boundary questions he formulates (see subchapter 3.1) attempt, precisely, to make the boundary of any social system design explicit, because it is there where Ulrich thinks that justification break-offs occur, and therefore where an appropriate object of critique can be found. But, according to what I have just said, drawing a boundary already assumes that there is an unproblematic space in which that boundary can be drawn, constituted unproblematically by elements or aspects which may lie on one or the other side of the boundary. This is also manifested in CSH in the fact that its methodological products—the twelve boundary questions and their polemical use (see Ulrich, 1987)—do not address the possible problems associated with the appropriate and reliable establishment of the elements which are in or out of a social system design boundary—i.e., its clients, its purpose, its measure of success, etc.—or about the possibility that there might be disagreement about them. The main issue for CSH and boundary critique concerns the choice of those elements which are seen by someone as relevant for a particular problem situation, being this choice something arbitrary that would depend on the particular system boundary drawn. But the elements themselves are not problematised. It is just said that in some social system design, with a certain boundary, some of them will be considered relevant because they would now "come into the picture"; whereas if the boundary is changed—by changing the system design—some others will now appear as relevant (see Ulrich, 2000). The point I am making here, instead, is that determination of the elements is as problematic as determination of the boundaries; and, moreover, that both kinds of knowledge depend on each other.

It is interesting to notice that Sellars' Myth of the Given and Davidson's scheme-content distinction appear here in a quite clear way, and not just by accident: Ulrich's systems thinking, as well as that of other authors in the Systems Movement, is based on Kant's ideas (see Ulrich, 1983). For instance, Peter Checkland has described how systems ideas are used in his proposed methodology to organise some given elements of experience, in the following way (1981, p.215):

[...] The world outside ourselves causes only the matter of sensation. Our brains order this matter and supply the concepts by means of which we understand experience.

[...] [A systems approach] uses systems concepts in order to see the raw data into a particular kind of information, and this is the process occurring in virtually all human thinking. Whether we realize it or not we view raw data via a particular mental framework, or world-view. We observe people voting and see, not 'marks being made on pieces of paper' but 'human beings taking part in the democratic process'. We attribute *meaning* to the observed activity by relating it to a larger image we supply from our minds. The observed activity is only meaningful to us, in fact, in terms of a particular image of the world or *Weltanschauung*, which in general we take for granted.

In this case, it is "the matter of sensation", or "raw data", or "experience", which are taken for granted, as unproblematic. The arbitrary elements—in this sense analogous to Ulrich's justification break-offs—are the concepts supplied by our brain, which constitute our "mental framework", and by means of which those raw data, or experience, are organised and given sense or meaning so they can be understood⁴⁶.

Nevertheless, the elements taken to be analogous to Kant's intuitions have been lifted in both cases way above their sensation-like nature and are conceptual elements in their own right. In this sense, even though knowledge of those elements or aspects may be in some cases non-inferential, it is not atheoretical. If they actually were of the same nature as Kant's intuitions, they would not be knowable—for knowledge is already the synthesis of intuitions and concepts—and would therefore be useless for critique.

be the equivalent of the unproblematic raw data that he mentions in the text quoted above.

⁴⁶ Here I did not review Checkland's proposed methodology, Soft Systems Methodology (see Checkland, 1981; and Checkland and Scholes, 1990). However, a reader acquainted with it may notice that at some moments or steps in it the real world is used—e.g., for comparison with the *holons* proposed—but not problematised at all at least when left at the level of non-systemic facts. These non-systemic facts would

In a much broader sense, the problem can be seen to lie in the idea that a whole is produced—not only in terms of an efficient but perhaps also of a formal causality—by some kind of operation on the parts (like organising them, drawing boundaries around them, etc.), without noticing that the parts are also an operation on the whole. To summarise, I have attempted to show in this section that there is a structure that characterises the idea of the given for empiricism, which seems to have been replicated in the systems view of readings of reality or weltanschauungen. The place of observation sentences in empiricism is taken by the descriptions of the actual or potential elements in the systems. But the argument against the given in empiricism could then also be replicated for these systemic views.

These conclusions are new in the sense that, as far as I know, no previous discussions in the literature have come to question the problematic inherent in the establishment of the boundary judgements made in any particular social system design. Ulrich has certainly taken them to be commonsensical, and to require no theoretical expertise at all (see the discussion in section 3.1.3), and the other authors reviewed do not mention it. However, it is interesting to note some links that can be established with some of the criticisms made at CSH, that were also mentioned in section 3.1.3. One of them is the lack of usefulness of the methodology in cases in which something like false consciousness exists, and in which therefore the laypersons who will have to suffer the consequences of the implementation of particular social systems will not want to be against them in the public debate (see Midgley, 1997; and also Jackson, 1985). What my discussion adds to that is the idea that at least in part that false consciousness might be seen by some as the result of an inability to see certain aspects of social systems designs which go against their existential interests. And the aspects that those with false consciousness are blind to would be aspects whose inclusion or exclusion from the social systems designs under question determine their going against their interests. In other words, false consciousness might be in some cases a direct consequence of the fact that the space of basic elements or aspects is problematic, and not given.

Another of the criticisms made at CSH arises from a problematisation of the competence, or perhaps authority, that a systems researcher may have to decide that in some particular situation "a set of people are unduly disadvantaged in society, that

others are benefiting at their expense, and that this scenario is best dealt with by supporting the apparently 'powerless'" (Romm, 1994, p.24). This idea seems to point at problematic aspects involved in the researcher's decision to act in particular ways in a situation. But let us notice that the questions the decision involves are in essence the same as CSH's boundary questions: who are/ought to be clients, what is/ought to be the system purpose, what are/ought to be the relevant forms of expertise, etc. This time, however, it is not laypersons who are critically questioning social systems designs that affect them, but the researcher her/himself who is questioning some societal mechanisms as well as her/his own intervention, as social systems designs. The difficulty in answering Romm's question is precisely a manifestation of the impossibility of givenness, as assumed by CSH. What my argument contributes in this discussion is that more generalising conclusion about the use of content-empty theories in general.

6.6.2 Givenness and Pedagogical Interactions

The analysis that can be made for the case of critical approaches dealing with pedagogy, and particularly with the immediate space of interactions, is indeed similar to the one just given in section 6.6.1. In this case, however, the total lack of reference to contents and the concentration on the aspects purely related to the form of the conversation, implies that the requirement of givenness is radically stronger. More specifically, whereas the approaches referred to in the previous section provided some questions of content with which critique was enabled, leaving the range of possible answers unproblematised, in this case it is neither questions nor answers which are provided.

This means that they are not problematised in any way, and the assumption seems to be that given the right conditions for the immediate space of interactions, some unimposed knowledge will emerge. But, the problem is, if no questions or answers related to content are prescribed for reflection, if the whole discussion is left to the participants' own devices, then other external or more subtle expressions of knowledge imposition along the lines of those questions or answers that failed to be provided, may become

present while at the same time being invisible to the participants. In general, this suggests that the problem of validity cannot be dissolved, or at least that we still do not know how to do away with it in a satisfactory way. And this in turn implies that the immediate space of interactions is not in itself an object of inquiry sufficient for addressing knowledge imposition.

6.6.3 Givenness and the Structure of Argumentation

The use of models of structures of arguments or of argumentation by the Critical Thinking Movement represents another case of the assumption that something is given. In this case, it is the actual messages that are to be questioned and the arguments behind them, which are deemed given. That is, it is the space of possible questionable elements which needs to be given if [some of] those elements are not to be imposed. At least one criticism suggested they are not given: that by Duhan Kaplan and other critical pedagogy theorists, that remarked that the messages to be questioned were not necessarily transparent and explicit, and that the lack of sensitivity for context limited the kinds of questions that could be formulated using the tools provided (see subchapter 2.1).

The issue here concerns the abstract nature of the tools for questioning. This is supposed to guarantee the neutrality of the theory of the critical in relation to the forms of knowledge that are to be questioned with it. But this abstract nature at the same time implies the lack of specification of the aspects relevant to those forms of knowledge about which questions can be formulated. It is precisely knowledge of those aspects which need to be given, but which the discussion in this chapter suggests are not. In the case of the criticisms launched from critical pedagogy quarters, the aspects they argued needed to be addressed were socio-political.

6.7 SUMMARY OF THE ARGUMENT

In this chapter I have presented some views in philosophy of language, mainly those of Sellars, Quine, Rorty, and Davidson. With this theoretical background, I have then proceeded to examine, from among the aspects described in chapter 5 as the requirements for the various critical approaches to be able to successfully prevent knowledge imposition, those that had to do with the act of reading reality. One of these requirements is inescapability. It affects mainly those approaches whose theories of the critical deal with validity, and entail and advocate one or more source readings, as well as those that deal with interactions and advocate a reading of the non-immediate space of interactions. The other requirement is givenness, which affects mainly those approaches whose theories of the critical do not make explicit the range of alternative answers to the questions they ask about content. This applies to content-empty theories of the critical, regardless of whether they address the issue of validity or of pedagogy.

The beginning specified the connection between certainty and inescapability on the one hand, and the idea of foundations of knowledge on the other. The main point is that absolute certainty outside of any doubt can only be given by some foundations which somehow can anchor pieces of argumentation—of claims and supporting reasons that appear and make sense only in what Sellars called the "logical space of reasons"—to something self-evident outside that space that can in an appropriate way stop the need for further justification.

The first of the two candidates for playing that *anchor* role was essentially related to the conceptual and the idea of *meaning*. Quine's arguments against the analytic-synthetic distinction shut the possibility that some form of conceptual certainty and inescapability can be achieved. The next candidate was the *empirical*. In this case it was Sellars' arguments that helped dismiss what he calls the Myth of the Given, the idea that there can be something in the senses, or in the world, or in our perceptual apparatus, that is self-evident and can escape the problem of justification by way of reasons—which also lie on a linguistic space. If correct, and I manifest my adherence to the claim, Sellars' work further implies that the empirical does not provide a foundation of knowledge either. However, it is only in the philosophy of Donald Davidson that both elements of holism—no analytic-synthetic distinction and no Myth of the Given—are combined, with the further addition of the rejection of the distinction between scheme and content;

that is, between a framework that organises and a content to be organised.

More generally, without anchors, there is no foundationalism. And with this, the requirement of inescapability cannot be attained. Similarly, the requirement of givenness, which referred to the unproblematic availability of all relevant aspects to a question or claim, was also found to have failed. The reasons for this have to do with Sellars' discussion of the Myth of the Given (and partly this was the reason for having called the requirement that way), and can be summarised in the idea that givenness requires that certain beliefs be unproblematic because independent from other beliefs in their justification—and, a fortiori, in their origin as well. But this is precisely what was shown to be untenable.

The failure to obtain inescapability shows that content-full theories of the critical, whether or not they advocate a source reading of reality, can actually promote the imposition of knowledge at the moment of promoting their own criticality. Similarly, the failure to obtain givenness shows that content-empty theories of the critical cannot prevent knowledge imposition, and depend on additional theoretical knowledge held by the user of the tools provided by the critical approach.

7. ON CRITICALITY AND INTERPRETATION

As announced in the previous chapter, in the present one I will address the issue of interpretation; that is, of what it is that allows someone—let us call her/him the *interpreter*—to come to understand the expressions in language uttered by another—a *speaker*. In doing this, I will answer a question that had been posed in chapter 5 about whether it is possible to attain what I then called *interpretation independence*. Interpretation independence refers to the idea that when interpreting another person's readings of some part of reality, the interpretation one produces does not depend on the beliefs one holds about that particular part of reality; that is, on one's own reading of that part of reality. There could be another related kind of [in]dependence, whose discussion I will postpone until chapter 9: that between one's readings of reality and one's readings of a process by means of which other people's readings of reality are constructed.

Given that one's readings of reality are forms of knowledge, in subchapter 7.1, then, I will examine the elements of knowledge that are involved in or required by interpretation as a competence. I will do this by addressing the question of what it is that one could know—what kind of knowledge one could have—that would allow one to interpret someone else. This question was formulated by Davidson (1973), and again my argument will largely follow his work, as well as Quine's to a lesser extent. The resulting picture can be said to be an implication of adopting a holistic view of meanings and beliefs, such as the one that I presented in a simplified way in the previous chapter. It is important to clarify that the analysis provided here does not lie on a psychological level, and remains philosophical. One consequence of this is that it will not exhaust possible empirical descriptions of how interpretation actually takes place in every occasion. The main problem I am interested in is that of the kind of knowledge that would take part in interpretation, without actually producing an account of the internal psychological mechanisms involved. Now, Quine's and Davidson's

work has focused on the case of interpretation between languages. However, the kind of interpretation that is involved in criticality and about which the interpretation independence requirement refers, is rather one across belief systems. Subchapter 7.2 will be devoted to providing that development, attempting to describe what is involved in interpretation across belief systems. Based on this theorisation, subchapter 7.3 will specifically examine the problem of interpretation independence and some implications that these conclusions, if correct, have for criticality. In doing this, I will have to develop some new elements from the starting point of the Davidsonian work on interpretation.

Nevertheless, the discussion on interpretation will be useful much beyond the limits of the problem of the interpretation independence requirement. This is due to an essential element shared by both interpretation and criticality: Criticality is concerned, at least for those approaches that in one way or another deal with the problem of validity, with the examination of readings of reality as produced by humans. In criticality it is not the world itself that is in question, or how the world is, but the readings of it as made by people. And if the world is ever in question, it is so only insofar as it is considered the product of actions by particular persons holding particular readings of reality that give rise to those actions. On the other hand, interpretation is, precisely, an activity of examining readings of reality. In a more specific way, it is an activity in which an interpreter determines what another person's reading of reality is, in a certain domain. Both activities are about, then, reading readings of reality.

7.1 INTERPRETATION AND THE RELATION BETWEEN TRUTH AND MEANING

I will start with a rather simple but narrow notion of interpretation, and then see if it can be broadened. Interpretation is referred to here as the understanding by an interpreter of someone else's utterances, where these utterances may have been expressed in whatever medium one may think of. For simplicity, I will call the person whose utterances are

being interpreted the *speaker*.

7.1.1 Meanings and the Problem of Interpretation

This issue of the kind of knowledge that is involved in interpretation has already been dealt with by Donald Davidson. In fact, he starts his essay *Radical Interpretation* (1973) by asking two questions that from the outset define the issue, as well as his wider project. Let me quote his words in full:

Kurt utters the words 'Es regnet' and under the right conditions we know that he has said that it is raining. Having identified his utterance as intentional and linguistic, we are able to go on to interpret his words: we can say what his words, on that occasion, meant. What could we know that would enable us to do this? How could we come to know it? (Davidson, 1973, p.125, my emphasis)

Davidson calls this knowledge of the interpreter a theory of meaning. That is, in order to be able to interpret, an interpreter would have some knowledge—which could be expressed in the form of a theory—which could take sentences uttered by the speaker as inputs, and would then produce an interpretation of them. An English-speaking interpreter hears a speaker—Kurt—say "es regnet", and then, using her/his knowledge expressed in a theory of meaning *for Kurt at that moment*, is able to know that he said that it is raining. It is important to notice that the interpretation does not simply produce the naming of a new sentence in the language of the interpreter, or a translation—e.g. the sentence "it is raining"—but an interpretation—the knowledge that what was said was that it is raining⁴⁷.

⁴⁷ It can be argued that the interpretation will necessarily yield sentences in the interpreter's language, for the interpretation has to be expressed in some language. This is true; however, these sentences are in some sense being used and not only named, and therefore cannot remain within quotation marks. This would distinguish translation from interpretation.

Meanings of Words

One might start with some notion of meaning that applies to words or to some incomplete expressions—which are in any case smaller than sentences. In this case, a theory of meaning would express the meanings of those words and then a way of constructing the meaning of the sentences out of them. The idea of being able to come up with the meaning of a sentence out of the meanings of the words or more basic expressions that constitute it, is a particularly interesting feature, normally called *compositionality*. Its importance lies in the fact that it would help explain one central characteristic of language; namely, being generative, or having the capacity to produce an infinite number of meaningful sentences out of a finite vocabulary and rules of syntax (see for instance Fodor and LePore 1992; and Davidson, 1967). But what constitutes the meaning of a word and how could one come to know it and with what evidence?

One first possibility is to take the meaning of a word as being determined by the object or objects in the world to which it refers. This way, the meaning of "Annette" would be given by the person called Annette. There are some related problems in this position, though. The formulation of the first one of them is normally attributed to Frege (see Fodor and LePore, 1992) and it consists in the fact that the same object may be the referent of two or more expressions which nevertheless differ in meaning. The classical example here is given by the co-referring expressions *Morning Star* and *Evening Star*: Even though they both refer to the same object (Venus), their meanings are different. Another related problem is that many words, like "Pegasus", do not have as a referent an object in the world, but nevertheless have a meaning. A related but different example of non-referential words is Davidson's "father" as used in the expression "the father of Annette" (Davidson, 1967): It does not have an object as a referent, unless one is prepared to declare a relation as being one. It does, however, have an influence on the meaning of the expression in which it occurs.

One might take words to stand for some kind of entities—perhaps of a mental nature—that one might as well call *meanings*. This picture here is one that Quine has described as the *museum* view: "Uncritical semantics is the myth of a museum in which the

exhibits are meanings and the words are labels. To switch languages is to change the labels" (Quine, 1969, p.27). But, of course, then there is the problem of how to characterise those meanings. What kind of entities are they, and how can one come to know them? As seen in the previous chapter, Quine undermined the distinction between the analytic and the synthetic, and with it very much the "idea" idea (see Quine, 1953a and 1969; also Rorty, 1979). If there are no sentences which are true by virtue of the meaning of their words only, then strictly speaking there are no sentences which can be said to *define* a term or *give its meaning*⁴⁸. There are, instead, sentences in which words occur and which we take to be true or false with more or less certainty and in different ways. When one is asked about the meaning of a word, then, one can only point at certain sentences involving the word—most likely as the subject or part of it that one knows for certain to be true. How does one know whether someone knows the meaning of a word? Because s/he knows how to use the word, which implies knowing correctly a great deal of sentences it can occur in and the truth-values that those sentences take. Of course, one may not be certain about whether or not some sentences in which the word occurs are true, and one may as well disagree with another person about whether or not they are. But to say this only makes sense if the truth-value of a great deal of other sentences containing that word is known and shared by both disputants. In this way, meanings are not entities. And as Frege would put it, only in the context of a sentence does a word have a meaning. Words do have systematic influence on the sentences in which they occur, but perhaps precisely because of this it is sentences which must become the focus of examination.

Meanings of Sentences

What happens then, when one turns to look at whole sentences instead of words? The proposed Davidsonian theory of meaning would then be one which would produce sentences of the following form (called M-sentences, see Davidson, 1967):

The sentence s means, in language L, m

⁴⁸ For some informal purposes, though, it may still be useful to talk about definitions; however, Quine's argument is a reminder to the fact that even definitional sentences can be abandoned in the light of inconsistency with other beliefs one holds.

If one starts with some notion of meaning in terms of reference, then *true sentences* might be said to refer to *facts* or *states of affairs*. This is nothing more and nothing less than a correspondence theory of truth: A sentence is true if and only if it represents or corresponds to a fact. The meaning of two different true sentences would be the same if they both represent the same fact, and the fact is what gives their meaning.

There is a problem, however, with how those facts are individuated. Different authors have attributed to Frege an argument whose conclusion is that if sentences represent, stand for, denote, refer to, or correspond to anything, then all true sentences refer to one and the same thing, which could be called *Truth*. Similarly all false sentences will refer to one and the same thing, which could be called *Falsehood* (see Church, 1956; Quine, 1953b and 1960; Davidson, 1967, 1969, and 1990; and Neale, 1995). This argument, which has been labelled the *slingshot* argument, would undermine the very idea of *facts*, for they could not be individuated in such a way that different sentences with different meanings could refer to different facts. If there are only two facts, one true sentences correspond to, and another false sentences correspond to, then their postulation would be rendered useless, for it would add nothing to the old ideas of being true and being false.

Neale has argued that, although it is not very clear that Frege did actually produce the argument, the one attributed to him and used by Church, Quine and Davidson makes somehow more assumptions than one produced independently by Gödel (see Neale, 1995 and 1999). The argument is very complex, though; here I will simply try to illustrate Neale's description of Gödel's slingshot argument by means of an example.

Suppose the following three sentences are true:

- (1) Alejandro Toledo won the 2001 presidential elections in Peru
- (2) Alejandro Toledo is different from the composer of Bolero
- (3) The composer of Bolero was French

Let us call the facts referred to by these sentences f_1 , f_2 , and f_3 , respectively. f_1 would also be the fact referred to by

(4) Alejandro Toledo is the only thing which is the same as Alejandro Toledo, and which won the 2001 presidential elections in Peru

because it would be the same fact that would make true (1) and (4). Similarly f_2 would also be referred to by (5):

(5) Alejandro Toledo is the only thing which is the same as Alejandro Toledo, and which is different from the composer of *Bolero*

The predicates of (4) and (5) are definite descriptions of unique things; and for these two descriptions that unique thing is the same; namely the person called Alejandro Toledo. If these descriptions are treated as complex singular terms referring to things (things like Alejandro Toledo), then changing a singular term contained in it for another with the same referent will not change the referent of the containing complex singular term⁴⁹. Given this, then (4) and (5) refer to the same fact. Therefore f_1 is the same as f_2 .

Similarly, (6) and (7) would refer to the same facts as (2) and (3) respectively; that is, to f_2 and f_3 :

- (6) The composer of *Bolero* is the only thing which is the same as the composer of *Bolero*, and which is different from Alejandro Toledo
- (7) The composer of *Bolero* is the only thing which is the same as the composer of *Bolero*, and which was French

And for the same reasons as expressed above in relation to (4) and (5), f_2 would be the same as f_3 . Given that f_1 was established to be the same as f_2 , then all three facts are the same. But it is strange to think that the fact denoted by the sentence "Alejandro Toledo won the 2001 presidential elections in Peru" is the same as the fact denoted by "the composer of *Bolero* was French". What do these two sentences have in common? The

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⁴⁹ This way, for instance, "the town where Gabriel García Márquez was born" and "the town where the author of '100 years of solitude' was born" refer to the same thing—the town of Aracataca—because the exchanged expressions—"Gabriel García Márquez" and "the author of '100 years of solitude'"—refer to the same person.

answer is simply that they both are true. And, extending the argument, all true sentences refer to the same fact. Facts, according to this argument, cannot be individuated such that they are the referents of [true] sentences and simultaneously distinguish them according to their meaning. There seems, then, to be nothing like a reality which is already divided up into pieces which are [or can be] denoted by true sentences; nothing like a world which, as Rorty has put it, "splits itself up, on its own initiative, into sentence-shaped chunks called 'facts'" (Rorty, 1989b, p.5).

If examining reference of sentences and postulating entities like facts does not help in specifying the meaning of a sentence, then it might be thought that changing from talk of reference to talk of sense, or from talk of extension to talk of intension, will do the trick. Sentences might be said, in this view, to express propositions. Two sentences would be synonymous—have the same meaning—if they express the same proposition. But then we are faced with a problem similar to the one we came across in the case of words: To describe a proposition—the meaning of a sentence—all one could do is to provide a number of particular sentences which one takes to be true, about the sentence in question. But just which sentences will give the meaning of the one in question is something that is not principled, if we reject the analytic-synthetic distinction. Here, again, to know the meaning of the sentence is to know how to use it.

Theories of Meaning and Theories of Truth

It is perhaps time to go back to the originally specified requirement of a theory of meaning; that is, to produce sentences of the type *s means in language L m*. Davidson here makes use of Tarski's definition of the predicate "true in language L" (see Davidson, 1967 and 1983; and Tarski, 1956) to solve the problems due to the use of terms that purportedly name meanings or propositions, due to the use of a sentence as a name. According to Tarski, a truth theory for a language L should produce sentences (called T-sentences) of the form

s is true (in language L) if and only if p

where s names a sentence—so that "s is true" makes sense—or is replaced by a formal

description of a sentence, and p is a translation of s into the language in which the theory is expressed⁵⁰. By being a translation of s, p in some sense carries the same meaning as s. For example, a theory of truth for Spanish formulated in English would have to be able to produce, among infinite others, T-sentences like

- (i) The sentence "la Tierra es redonda" is true if and only if the Earth is round
- (ii) The sentence "George Bush Jr. pretende romper el acuerdo de Kyoto sobre medio ambiente" is true if and only if George Bush Jr. is intending to break the Kyoto agreement on the environment

As Tarski was dealing with formal languages only, he took translation and meaning for granted, and used them to *define* the predicate "is true in language L". But it is precisely meaning which is being questioned now. Instead, Davidson takes "is true" for granted—in general, without specification of the language—as a primitive, basic, and unanalysable predicate, and uses it to illuminate the notions of meaning and translation (Davidson, 1990). Moreover, he will use this result to provide an account of interpretation, as will be explained in section 7.1.2. This is the reason why Davidson has suggested that a truth theory in Tarski style will do duty as a meaning theory for a speaker. In fact, Davidson has turned its use around completely, by changing what is taken for granted in constructing it, as well as the way its results are to be understood (Davidson, 1984).

7.1.2 The Intertwinement of Meanings and Beliefs

To further show how the concept of truth illuminates the concept of meaning, Davidson follows a strategy of Quine's (see Quine, 1958 and 1960), which is to imagine the extreme position of someone trying to interpret the language spoken by people in a community, a language of which s/he has no clues at all, and which is radically different from any other language s/he already knows or has been in contact with. This person,

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⁵⁰ If both languages are the same, then p is the same s.

by being in this position, is labelled by Davidson—again, following Quine—a *radical interpreter*. One central point for examining this situation is that the interpreter does not have access to semantic elements as resources for carrying out the interpretation, and therefore they will not be presupposed. This is a virtue if one considers that it is precisely semantics that the theory is supposed to explain. For doing this, s/he will place her/himself as a foreigner in a community of speakers of the strange language s/he is to decipher. Quine was interested mainly in the syntactic features of this decipherment, and named this project *radical translation*. Davidson, more interested in the specifically semantic aspects of it, correspondingly named his own version *radical interpretation*.

The radical interpreter will start by matching sentences of her/his language with sentences as uttered by the natives in particular circumstances. Quine's example is that of the interpreter noticing that the utterance "gavagai" is expressed by the natives when in presence of a rabbit in their proximity (Quine, 1960). This induces in the interpreter a first working hypothesis that "gavagai" can be translated as "here's a rabbit", or "a rabbit" or some similar *sentence*. The first sentences to be worked out, with the possibility of error always latent, are those which, like that of *gavagai*, can be associated to particular circumstances that can be picked out by the interpreter. Importantly, let us notice that doing this involves observing patterns of that kind in the linguistic behaviour of the speakers. Those are the same patterns that allow one to recognise that the beings observed—human or otherwise—speak a language. Something else that is of importance is that it is sentences which the interpreter works with, rather than words or expressions, for it is only them that constitute the minimum units of language *use*.

These features are linked in a neat way with Davidson's use of Tarski's T-sentences: Firstly, the semantic basis of T-sentences is related with sentences—as when it is said that p should be a correct translation of s—and not [directly] with words or non-sentential expressions. The compositionality feature will only come to play a role *after* a theory of truth and meaning has already been established for a speaker or a language. Secondly, there is an established relation between truth and meaning: The sentences in English proposed as a hypothesis for translating the sentences in the native language in the example are such that they are [believed to be] true most of the time.

Related with this there are some themes here that Quine touches, but which are developed more extensively by Davidson (see Davidson, 1973, 1974a, 1974b, and 1983). One of them is the connection between meaning and belief. This connection can be seen in the fact that even though the interpreter does not have any previous notion of beliefs or meanings about the speakers and their language, yet s/he must decipher both at the same time. If s/he knew all the meanings of the language—and knew how to tell what propositional attitudes the native speaker has, or at least the attitude of believing true—s/he could know what the native believes. But even if it can be correctly assumed most of the time when both speaker and interpreter speak the same language that meanings are known to the latter, how does one know that the assumption is justified? There are slips of the tongue, malapropisms, and very frequent and non-mysterious cases of different uses of the same word or expression (see for instance Davidson, 1982). Conversely, if s/he knew all the beliefs the native speaker holds, then s/he could get to know what the meanings of the sentences are. The problem, however, is that of how to assign both to the speaker, assuming neither. LePore has put this point like this: "We cannot hope to discover interpretation first, and then read off beliefs and vice versa" (1986, p.18).

The solution to this puzzle constitutes another important theme. The idea is that the sensible way forward is to grant the native speaker truth in her/his beliefs as much as it can be conveniently possible, fixing some beliefs in this way and then solving for meaning. This principle is usually referred to as the *principle of charity*, that Quine attributes to Wilson⁵¹ (see Quine, 1969; and Wilson, 1959). Expressed in a negative way, it states that an interpretation that holds the speaker wrong in most matters is likely to be a bad interpretation. The example above shows just how this principle works in practice: By translating "gavagai" as "here's a rabbit", the interpreter takes the native to be correct about the presence of rabbits, in the circumstances in which s/he uttered the sentence, and this is precisely what allows him/her to suggest that as a possible translation. Concluding that the speaker is wrong in most cases—e.g. that the native normally mistakes rabbits for dogs and that "gavagai" is to be translated as "here's a

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⁵¹ It is important to note that whereas Quine restricts his claims about the involvement of the charity principle in translation to logical truths, Davidson argues that it applies in a generalised way "across the board".

dog"—would probably mean that the interpretation is wrong, rather than that the speaker is wrong her/himself. The use of the principle of charity in interpretation does not mean, of course, that there will be no disagreements. It simply implies that for disagreement to make sense, there must be a lot of agreement on many other things. It is instead a principle of maximisation of agreement. This is not simply a plea for solidarity or sympathy, but mainly a necessary restriction for the very idea of language to make sense. The simplicity of the example above should not be an obstacle for extrapolating the conclusion to cases of sets of sentences rather than single sentences, of sentences less dependent on particular occasions of utterance, and of sentences which are formed in a less direct connection with the sensory organs, for the original considerations have not ceased to apply to these cases (for instance, see Davidson, 1967, 1995, and 1999c). For example, the existence of malapropisms and the fact that we can normally understand the intended meaning also suggest that charity applies in these not-necessarily-occasional sentences (see Davidson, 1982).

As Malpas has pointed out, the two-dimensional relation between beliefs and meaning has been transformed into a three-dimensional relation that includes truth (see Malpas, 1992). The connection between truth and translation has been established, then, in that the interpreter takes those truths—according to her/his view, for there is nothing else available to her/him—that s/he takes the native speaker to believe, as determining the meaning, if one likes to talk that way, of the sentences uttered by them. Furthermore, the need to use the charity principle in interpretation and the intertwinement between meanings and beliefs constitute an indication that most of our beliefs must be true, even if any one of them can at any moment be doubted and proved false.

In radical interpretation, then, the interpreter can be seen as producing a theory of meaning for the native speaker's language, as well and at the same time as a theory of the truth of his/her beliefs. But it can be argued that a theory of meaning is also a theory of truth for the native speaker's language. Taking into account Quine's considerations on analyticity and synonymy (see Quine, 1953a) and his criticism of the "museum view of meanings" (1969), by giving for each sentence in the natives' language (the object language), a sentence in the interpreter's language that is true if and only if the original one is true, a theory of truth for the speaker's language provides

all there is to the notion of meaning⁵² (see Davidson, 1967 and 1973). Expressed in other words, "translation succeeds only if it preserves truth, and the traditional aim of translation is to preserve meaning" (Davidson, 2000, p.70). And interpretation can take place with the construction of a meaning theory for a speaker, by means of attributing truth to her/his sentences whenever possible. Rorty has similarly remarked, although in the different context of interpretation of texts of authors from the past, that "you will not know much about what [those authors] meant before figuring out how much truth they knew" (Rorty, 1984, p.251).

7.2 Interpretation Across Belief Systems

A result of the argument in the previous subchapter and a consequence of holism in general consists in the conclusion that grasp of meaning (i.e., interpretation) requires and actively involves a reading of reality from which it can take place. In other words, an interpreter is necessarily a language user and a holder of beliefs. However, there is the question of whether that analysis applies to the situations and problems that I have been discussing in previous chapters, and particularly whether it is relevant for the requirement of interpretation independence in relation to the problems of knowledge imposition and validity, as postulated in chapter 4.

In fact, certain aspects of the Quinean and Davidsonian accounts of interpretation must be elaborated so that these analyses can be applied to the cases I concentrate on in this study. And it is these aspects that I want to examine now. The first one of them refers to how relevant an approach to the problem of interpretation is, that understands it in

⁵² Some authors have criticised the centrality that Davidson attributes to the concept of truth (see for instance Rorty, 1995 and 2000; Williams, 1999; and Horwich, 1998 and 1999). Noting that sentences like "it is true that this landscape is beautiful" and "the sentence 'this landscape is beautiful' is true" add nothing—except rhetorically—to "this landscape is beautiful", most of them favour a *deflationary* account of truth that only grants this notion some limited rhetoric and expressive power (in sentences like "everything in that report is true" which cannot or may only be awkwardly expressed by sentences not including the word "true"), but not explanatory. For the purposes of my discussion here, it is simply important to note that these deflationary views—like Quine's, Williams', and Horwich's—still have to rely on the *endorsement* of a sentence as a basic element in language (see also Rorty, 1986). It is this endorsing which is of importance for my purposes.

terms of translation from the speaker's language into the [different] language of the interpreter. The difficulty lies in that by having chosen the most radical situation of interpretation for analysis, Quine and Davidson seem to have restricted interpretation to translation between languages, and to have left out of the picture other aspects of interpretation which seem to occur without translation between languages. This suggests that an important question to ask is, then, about what it means to *share a language*.

A second aspect concerns the relation between speaking a language on the one hand, and holding beliefs or having readings of reality on the other. The notion of interpretation independence, as postulated in chapter 5, is related to the question of whether an interpretation of a reading of reality might be independent from the interpreter's own reading of reality. Therefore it is mainly concerned with some notion of interpretation between, if one can properly speak this way, readings of reality. But if interpretation involves a translation from the speaker's language to the interpreter's language, then there is a question about the relation between speaking a language and holding a reading of reality. The first two sections in this subchapter will be devoted to these two issues—of sharing and speaking a language—respectively.

Based on the previous two sections and on some other aspects addressed before in this document, in the third section I will try to provide a more integrated view of the additional aspects of interpretation that can account for the purposes of this study.

7.2.1 To Share a Language

It has already been briefly mentioned in passing that Quine and Davidson take the problems of radical translation/ interpretation to also appear when speakers of the same language try to communicate. For Quine (1969, p.46), "radical translation begins at home. Must we equate our neighbor's English words with the same string of phonemes in our own mouths? Certainly not; for sometimes we do not thus equate them." Similarly, Davidson claims that "the problem of interpretation is domestic as well as

foreign: it surfaces for speakers of the same language in the form of the question, how can it be determined that the language is the same? (....) All understanding of the speech of another involves radical interpretation" (1973, p.125).

Therefore the case of the linguist or anthropologist learning a totally new-to-her/him language spoken by the natives in some remote community is not, in their view, totally different from communication with one's neighbour. Davidson presents a useful and simple example of the interpretive balancing act between beliefs and meaning, in the domestic case:

If you see a ketch sailing by and your companion says, 'Look at that handsome yawl', you may be faced with a problem of interpretation. One natural possibility is that your friend has mistaken a ketch for a yawl, and has formed a false belief. But if his vision is good and his line of sight is favourable it is even more plausible that he does not use the word 'yawl' quite as you do, and has made no mistake at all about the position of the jigger on the passing yacht. (Davidson, 1974a, p.196)

Whether the language spoken by speaker and interpreter is the same is, then, always a hypothesis that can be proved wrong and for which justification may *sometimes* be needed. So sharing some rules or conventions—the rules or conventions of a language—cannot be central to what it is to speak a language. The point is that an interpreter constructs a theory of meaning for the speaker s/he is engaging in conversation with, that fits *that speaker on that occasion*. This theory of meaning, although very likely to be useful for her/his interpreting skills for future occasions, is never enough for guaranteeing successful interpretation in the future, not even for the same speaker. Any possible differences in the use of old words and expressions, any newly created words and expressions, any slips of the tongue, any possible malapropisms, and any related features that cannot be anticipated, will render any old theory of meaning useless to some extent. And yet language-users cope with all these new experiences. Perhaps even more straight to the point, and more startling, too, is Davidson's conclusion that

there is no such a thing as a language, not if a language is anything like

what many philosophers and linguists have supposed. There is therefore no such thing to be learned, mastered, or born with. We must give up the idea of a *clearly defined shared structure* which language-users acquire and then apply to cases. (Davidson, 1982, p.446, my emphasis)

What distinguishes us as language-users is, instead, the capacity to continuously construct and reconstruct our theories for understanding others—theories of meaning—usually at the very moment at which communication occurs (see also Davidson, 1982). And this capacity cannot be understood correctly if one tries to separate meaning from truth and beliefs.

There is, then, an important sense in which languages are not shared, or at least in which this cannot be taken for granted. The skills of radical interpretation permeate even the so-called domestic cases in which the same language is spoken, and even more so in cases in which for some reason words and expressions appear to be used differently.

7.2.2 To Speak a Language and to Hold a Reading of Reality

As mentioned before, a theory of meaning constructed by an interpreter is also a theory of truth. It can be seen as producing sentences in the interpreter's language that somehow translate or describe the sentences uttered by the speaker. But then what is it for a sentence to belong to the interpreter's language? And does this have any relation with holding a reading of reality?

Given the relationship between meaning and truth, one might say that a sentence that belongs to the interpreter's language is one which s/he understands to directly give truth conditions (see Davidson, 2000); for, if the language is the same, T-sentences would be

of the form "the sentence s is true if and only if s"⁵³. However, at first sight, at least, the idea of giving truth conditions still seems to be obscure, not less than that of belonging to a person's language. But, we should then take into account that in Tarski's Tsentences, which are of the form "s is true in L iff p", s is only named—and could be replaced by any other description of the sentence—whereas p is used. From here an important insight can be developed: An interpreter's knowledge of the truth conditions of a sentence may be reflected in her/his ability to use it, as opposed to simply name it. But then what is it to be able to use a sentence? In the case of a word one would say that to know how to use it is to know a great deal of meaningful sentences which include that word, and the truth value of many of those sentences—relativised to an occasion, a speaker, a context, etc., as appropriate. In the case of whole sentences, one might as a first step claim something similar. To know how to use a sentence would be to know a great deal of more complex sentences which include the original one, and the truth value of those sentences—again, relativised as appropriate. But it is possible to go a little further. Given the compositionality of language, to know how to use a sentence might in many cases imply to know how to use [some or all of] the words that constitute it; that is, other sentences in which they occur and their truth values. This is simply a consequence of adopting the holist doctrine that I have been explaining and advocating so far. In general, it does not make much sense to say that one understands a sentence if one does not know a great deal of related sentences.

A criticism raised by Fodor and LePore (1991 and 1992) about holism suggests that there is a problem with the determination of *which* sentences *give* the meaning of a linguistic expression as its inferential role in a system of beliefs, and given that there is no limit as to what beliefs in the system could be affected inferentially by it, even if very weakly, then there is no limit as to what beliefs give a linguistic expression its meaning. That is, the meaning of an expression would depend on *the whole* belief

⁵³ This idea of associating the meaning of a sentence with its truth conditions should not necessarily be taken as part of a verificationist theory, according to which "the meaning of a statement is the method of empirically confirming or infirming it" (Quine, 1953a, p.37). This relation could only be established if one took truth conditions to be conditions of empirical verification. But the account provided here does not leave room for such theory.

⁵⁴ Actually their argument concerns three hypotheses of which they say that at least one must be let go: that compositionality is a property of natural languages, that there is no principled analytic-synthetic distinction, and that the meaning of a linguistic expression is given by the inferential role it has in a system of beliefs.

system in which it is used. But this would then mean that if two belief systems differ on anything at all, then they differ on everything, and perhaps that no two individuals can ever share a belief unless they shared every belief—because otherwise no meanings would be exactly the same. And indeed it can be argued that authors like Kuhn and Feyerabend have used some variant of this line of reasoning to argue in favour of the incommensurability thesis (see Kuhn, 1962; and Feyerabend, 1972; for some discussion of this point see also Putnam, 1975; and Rorty, 1979). One possibility to avoid this difficult conclusion—if one wants to avoid it—would be to try to restrict the kind of sentences which play this role. However, this would be to reinstate some form of the analytic-synthetic distinction, which Quine persuasively attacked (see subchapter 6.2).

But, it seems to me that a problem with this criticism is that it takes meaning to be some kind of entity which should be given by something—like inferential role, reference, etc.. Instead of this, what the Davidsonian account has shown is how the [basic] notion of truth can illuminate—though not define—that of meaning, and particularly how sameness of meaning has to preserve truth conditions. No finite or infinite set of sentences can give the meaning of a sentence—not even the whole system of beliefs save, perhaps, that sentence itself. What can properly be said, and taking an example by Fodor and LePore, is that it does not make much sense to attribute someone the belief that Rover is a dog—i.e., to attribute her/him this belief as what is meant by some sentence s/he endorses, like "Rover es un perro"—if s/he does not seem to believe that Rover is an animal, that Rover is not a cat, that Rover's mother is/was a bitch, etc. But these sentences do not give the meaning of "Rover is a dog". And, as Quine has shown us, no particular sentence is necessary in this list: For some strange reason or in some strange circumstances someone might think that Rover is a dog but not an animal, and s/he might be right. But if too many related sentences seem to not match, then perhaps the original interpretation is wrong⁵⁵.

At the beginning of this subchapter I suggested that a question which is relevant for the present study was about the relation between interpretation *across* different readings of reality, and interpretation *across* different languages. A problem with this way of

⁵⁵ Of course, it is not only a matter of *number* of sentences, for some will have a stronger effect on one's conclusions than others (see LePore, 1986). But there is no clear way in which this conclusion could be systematised.

phrasing the question is that the idea of interpretation between different readings of reality seems to presuppose that it has been established that the readings are different, but it has not been established yet what interpretation between them is like. The difficulty lies in the fact that if one has established that the readings are different, then one must have already produced an interpretation which recognises the existence of disagreements or differences.

What can be said, taking this into account, is that for some purposes it might be useful to draw a distinction between meanings and beliefs; and that, exactly, one does in interpretation. But a consequence of giving up the analytic-synthetic and the scheme-content distinctions is that this separation has no clear rules. If one is talking about words then one may have, as it were, and using Rorty's phrasing, *dictionaries* and *encyclopaedias* as separate books (Rorty, 1988b). But it is not clear or principled what should go in each of them, or which changes in one's beliefs should propel one to modify one's encyclopaedias and which to modify one's dictionaries. In a strict sense the phrases found in the dictionaries do not give the meaning of words, except in the mild and non-absolute sense that they constitute sentences which one takes to be less contingently and more certainly attached to the word they supposedly define, as compared to those in encyclopaedias. And something similar can be said about whole sentences as opposed to single words.

A further consequence of the argument just presented above concerns translation. In the same way that any sentence—even those in dictionaries—can be challenged, and that in that sense any sentence may be taken as a hypothesis, in interpretation it is also always a hypothesis whether a sentence in the interpreter's language correctly translates a sentence in the speaker's language. That is, and again in accordance with the rejection of the analytic-synthetic distinction, any conclusion about whether two sentences have the same truth conditions can always be challenged on the basis of whatever one may consider evidence for that, regardless of whether or not the two sentences are in the same language. If in this very strict sense an individual cannot possibly tell analytic sentences from synthetic ones, then the certainty associated with analyticity can never go with interpretive sentences like "the sentence 'la nieve es blanca' is true if and only if snow is white" either. As Davidson has claimed, they are not tautological (for it is only in the special case of the meta-language containing the language, that the same

sentence is used and named in the Tarskian T-sentence), but in some sense empirical.

Interpretation, in the light of this, is about constructing theories of meaning that are always hypothetical in character, producing interpretive hypotheses.

7.2.3 A Wider Sense of Interpretation

Cautionary Words About Stance

Some words of caution are in place before I try now to broaden the notion of interpretation to make it more attuned to this project. It is important, in examining issues about interpretation, to be careful and follow a line of argument that does not presuppose the point of view of an omniscient interpreter. It is easy enough to succumb to the temptation of assuming interpretation as transparent to the philosopher or psychologist producing the argument, but not to the persons who are described in the philosopher's or psychologist's stories. This would be a stance from which what a speaker says can be described in a transparent way, as well as the interpretations of the speaker's words produced by interpreters, and those interpretations compared with each other and/or with what the speaker said. For example, this kind of strategy is implied whenever it is claimed that some interpreter has projected her/his own rationality onto a speaker by attributing her/him certain beliefs and meanings, and has thus failed to grasp the speaker's rationality. The narrator would be telling us what the speaker said and what the interpreter understood, but for this to be possible the narrator's words would have to be unproblematically interpretable. But one can always ask in these cases about the relation between the interpretations that the narrator her/himself has produced and those by the interpreters, and about the possibility of getting to know them. Any comparison between interpretations assumes that the interpretations themselves have been transparently well interpreted by the person making the comparison.

For the sake of clarity, let me say now that I am not claiming that such talk is pernicious

or confused. Descriptions of interpretations and their comparison with speakers' words are certainly meaningful, and they seem to be part of our normal conversations when we talk about what other people meant by what they said. But when one does this, the stance taken assumes that one has a better interpretation than the one described. This is not problematic in itself, as it is precisely what one is claiming. The problem appears only when one wants to take a further step, and derive from it abstract philosophical conclusions about interpretation; for the argument leading to those conclusions would presuppose the transparency of one's own interpretations. This point I am trying to make is similar to the one that can be applied to the philosopher, anthropologist, biologist, or psychologist who, intending to demonstrate the partiality or relativity of someone's [or everyone's] knowledge or perception, describes the product of her/his reasoning or cognition for later comparing it with *the real thing* as described in some neutral even if less powerful language⁵⁶.

In this respect, the Davidsonian and Quinean analysis of interpretation takes the point of view of an interpreter, who is actively involved in the situation. It is not a spectator transparently observing interpretations and beliefs by the actors involved in the situation. And it is my contention that this is the only warranted step to take, if one is to avoid assuming one's own readings or interpretations while problematising those of the others. The patterns in a speaker's linguistic and non-linguistic behaviour are patterns as observed by the interpreter. It is from this point of view that true sentences and beliefs cannot really be distinguished, because for the interpreter there is no way of telling them apart; for, as Plato said, truths do not come with a mark. But in this same way, the conclusion that the interpretation has to be made from an interpreter's beliefs comes from noticing that whatever patterns s/he observes, could be false beliefs, or at least disputable.

Related Sentences

I will now pick up on a theme of the previous section; namely, that the interpretation of a sentence endorsed by a speaker can only be sensibly deemed correct if the interpreter

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⁵⁶ It seems to me that classical examples like Kuhn's (1962, chapter X), Whorf's (1956), Geertz's (1976), and Maturana and Varela's (1992), all follow this pattern.

attributes her/him many other related beliefs, and can count her/him right in a great part of them. And, as also argued before, there is no single belief which is necessary to that list of related beliefs, and no set of them is sufficient—although for practical purposes in most cases one is usually well justified in reaching a conclusion and producing an interpretation.

In radical interpretation, when an interpreter produces a translation of some sentences uttered by a speaker, s/he does it on the basis of an overall pattern of truth and consistency, as suggested by the charity principle. In more standard cases of interpretation, that truth and that consistency are largely presupposed and only rarely questioned, on grounds of previous acquaintance of the use of particular linguistic expressions by members of the community. But whether with evidence weighed and used, or simply presupposed, the attribution of a belief to a speaker by an interpreter entails that the latter is prepared to attribute the former many more beliefs, expressed in sentences related to the originally translated ones. These related sentences would effectively be ones that the interpreter her/himself takes to be entailed by the translated ones, and that therefore s/he thinks the speaker will—or should—agree with. In fact, an interpreter does not attribute a speaker a belief, but many *at the same time*.

It is important to point out, however that it is not possible to draw too clear lines separating translated sentences from related sentences. My argument for the fuzziness of this line is a simple one: When writing a text, for example, the speaker—who is a writer in this case—will have very probably tried different phrasings for her/his sentences, will have tried different structures, will have removed sentences which s/he thought were less relevant, and will have added others. It was probably not written in its final form from the first time. Any change entails from the speaker some beliefs about the relations between the sentences in the text as it was, and the ones involved in the modification. This suggests that all these sentences are, for the speaker, related to each other. The final text will be constituted by the possibility chosen from among the many tried, under various criteria and restrictions. But it remains difficult to point at this one or at any other of the possibilities tried for the final text—and the ones not tried, too—by the speaker, and say that it is the one that really conveys what s/he wanted to express.

If this happens on the side of the speaker, then it also happens for the interpreter trying different interpretive possibilities. When the focus of one's attention is a single, simple, and relatively small sentence—like *gavagai*—then the line between a translated sentence and related sentences may be more clearly drawn. However, if one stops concentrating in sentences of this kind, and parts from Quine and Davidson, then it becomes more difficult to draw it, for reasons similar to the ones mentioned in the previous paragraph. How would an interpreter describe what was said by the speaker? And, strictly speaking, a whole theory can be taken to be a very large and complex sentence. Nevertheless, the distinction still seems worth keeping in that some related sentences will look—to the speaker, the interpreter, or some other person—like not necessarily being within what was meant by the speaker, whereas other sentences will look this way. But a great deal of sentences will not be easy to classify on either side.

The conclusion I draw from this is that, because of their active involvement in the translation of sentences, a widened notion of interpretation is necessary that should include related sentences. In this sense, it is part of someone's interpretation of a text her/his rephrasing of its sentences, and the additional related sentences used to represent the speaker's ideas or the theory in question.

Interpretation and Genres of Reconstruction

I have just argued that the distinction between translated and related sentences is fuzzy. But it still makes sense in some cases to say that some beliefs one can properly attribute to the speaker, and that some others are inferences that follow from her/his ideas, even if s/he has not explicitly claimed them. What the argument above suggests, however, is that there cannot be absolute certainty about which side any one sentence lies on.

In the context of historiography and specifically talking about the interpretation of texts of authors from the historical past, Rorty has drawn a distinction between two genres which to some extent bear an important relation with the distinction between translated and related sentences⁵⁷ (Rorty, 1984). The first of these genres is *historical*

⁵⁷ Rorty actually talks of four genres. However, the other two arguably lie on a different level, and do not have the same relevance for the present study.

reconstruction, and it seeks to understand a text in relation to the ideas and discussions at the time when it was written, in terms, for example, of the real and imagined conversations between its author and her/his contemporaries "or, more precisely, by that selection of their contemporaries or near contemporaries whose criticisms and questions they could have understood right off the bat—all the people who, roughly speaking, 'spoke the same language'" (p.249). The other genre is rational reconstruction, and in it one places the text in one's own context and forces its author to have imagined conversations with one about issues that perhaps s/he never formulated.

According to what I have been arguing, an historical reconstruction would be an interpretation for whose formulation the interpreter would attempt to stick only to translated sentences, or to those related sentences which in her/his view—what else?—are so closely related to the former that it would be inconceivable that the author would not have understood and accepted them immediately. In a rational reconstruction the interpreter less carefully makes use of related sentences for which their relation with the translated sentences is looser and more complex, perhaps requiring much more of a supporting theory to justify their postulation. Because of this, in some cases they might deal with issues that can more clearly be taken as not having been dealt with by the original author in question. This way in a rational reconstruction, for instance, "in an imagined argument with present-day philosophers about whether [Plato] should have held certain other views, he would have been driven back on a premise he never formulated, dealing with a topic he never considered—a premise that may have to be suggested to him by a friendly rational reconstructor" (Rorty, 1984, p.252).

Inevitably, both types of reconstruction deal with related sentences as well as translated sentences; and, as I have said, the distinction between them is not a sharp one. But the possibility of rational reconstruction suggests that it is meaningful to talk about interpretation in an even wider sense than was apparent if one strictly followed Davidson's and Quine's examples. It has not been a change of topic, though, or an actual change of concept. It is not talking about a completely different idea of interpretation, for the reasoning line has been maintained. The possibility of rational reconstruction, instead, suggests that there is some wider sense, as compared to the discussion so far, in which it is meaningful to attribute someone certain beliefs, even if they do not seem to have explicitly appeared in her/his texts/speech.

The relevance for the present study of considering rational and historical reconstructions is not hindered by the fact that they are both genres postulated within historiography. The point is that they are two *ideal types* of interpretation that should not be taken as only possible or meaningful when discussing texts of dead authors from the past. However, if the texts one examines are too close to one's cultural and intellectual communities and time then possibly not many significant differences between the two kinds of reconstruction will be found, because one will already be part of those contemporaries with whom the author is engaging or has engaged in conversation. Nevertheless, as long as there are disagreements and new issues that can be discussed, a reconstruction is possible.

7.3 INTERPRETATION INDEPENDENCE AND KNOWLEDGE IMPOSITION

After having examined some important aspects of interpretation, I now have the tools for addressing the requirement of interpretation independence in a direct way. The reader may be aware by now that the conclusion of the present subchapter is that interpretation independence is an illusion. Nevertheless, it is still important to spell out the way in which it is violated, and the possible consequences of not taking this into account.

7.3.1 Related Sentences and the Interpreter's Beliefs

In the previous subchapter I described the role of related sentences in interpretation, and the difficulty that lies in the attempt to distinguish them clearly from translated sentences. Here I want to concentrate more on the relation between these related sentences, and the readings of reality that the interpreter makes. The conclusion, to

anticipate it, will be that related sentences are produced within the interpreter's belief system, and that therefore they are directly dependent on her/his reading of reality.

Indeterminacy of Translation

First, a clarifying point. There is an argument in Quine's texts about what he calls the indeterminacy of translation (see Quine, 1960 and 1969). His claim consists in the rejection of the idea that all the possibly available evidence to the linguist attempting a radical translation, uniquely determines *one* correct translation. In his view, possible changes in the way one translates some of a speaker's words, can be compensated by changes in different parts of the net of translating words. This argument, although providing support for an idea about different and valid but mutually exclusive possibilities in interpretation, does not really have anything to do with the problem I am interested in examining here of the relation between holding a reading of reality, and the interpretations one produces of other people's words and sentences. On the one hand, there might not be a problem at all here. That is, one might think with Davidson that the situation of the different interpretive possibilities is analogous to that of temperature being measured in different units (like Celsius and Fahrenheit), and that therefore meaning can be taken as whatever is preserved in all correct translations (see Davidson, 1991). On the other hand, Quine's indeterminacy of translation affects the choices that one single interpreter has for deciding on a correct interpretation of the speaker's words.

Interpreter's Beliefs about what the Speaker Does or Would Believe

Instead of the issue of indeterminacy, I want to concentrate on a somewhat different problem which is related to two facts of interpretation: first, that an interpreter can only produce working hypotheses with the [limited] evidence s/he has; and second, that for an interpretation to make sense it is necessary that the interpreter takes the speaker to agree with her/him in a great deal of sentences, *but not in all of them or in any one in particular*.

At the end of section 7.2.3 I noted above that related sentences are taken by the

interpreter to be entailed by the translated sentences, and usually to be agreed upon by the speaker. But in what sense does one say that a sentence is entailed by another? For every particular case this is something that has to be decided by the individual doing the interpretation—or, in general, the inquiry. And that means that it depends on the particular beliefs that the interpreter holds. For example, if the interpreter is prepared to attribute the belief "Rover is an animal" to someone who seems to endorse "Rover is a dog", and because s/he does so, then it may be the case that s/he believes both that dogs are animals, and that the speaker will think the same way. And s/he must be prepared to do so with a large number of sentences, for otherwise it does not make sense to make any attribution of meanings or beliefs. And, in describing the speaker's views, an interpreter may in a perfectly reasonable way make use of related sentences of this kind. Given the charity principle, one would expect that the use of these related sentences would be well justified most of the time. However, given that there cannot be such a thing as a source of certainty (see chapter 6), there is no guarantee that any of those related sentences will not be disagreed upon by the speaker. That is, it might still be the case that after further conversation with the speaker, everything else seems to indicate that s/he does not believe that dogs are animals⁵⁸.

The important point is that "dogs are animals" is a sentence endorsed or believed true by the interpreter, and it is on the basis of the charity principle that s/he attributes it to the speaker. As argued in subchapter 7.2, Davidson's analysis can be shown to support in a direct way the idea that the interpreter's beliefs are actively used in producing translated sentences. As for related sentences, the argument in the paragraph above suggests, this connection becomes stronger. In the extreme cases in which in some loose sense the related sentences attributed to the speaker by the interpreter concern topics and issues perhaps less explicitly mentioned by her/him—as in rational reconstructions—those topics and issues are to some extent introduced by the interpreter. Related sentences here can be seen as bridging or linking the speaker's attributed beliefs with those beliefs held by the interpreter about topics and issues which are of her/his relatively immediate concern. But more important than the mere selection of topics and issues is that the related sentences formulated by the interpreter depend on her/his logic for deriving what

⁵⁸ But of course, for reaching the conclusions that the speaker is talking about dogs and animals, and that s/he believes that dogs are not animals, the interpreter must have attributed the speaker many more true shared beliefs about dogs and animals—true, again, in her/his own view.

is entailed by the beliefs attributed to the speaker. And, if one is to distrust any form of analyticity including logic, then her/his logic cannot be considered independent from her/his beliefs, but constituted by them.

It can be argued that sometimes it is not even necessary for the speaker to agree with these related sentences, while it still being sensible to hold on to the interpretation. For instance, once that in some sense the speaker is detached from a set of sentences s/he endorses—for example using a label like *theory* to refer to this set—one may talk about assumptions and/or consequences of that theory. These will be related sentences which the interpreter attributes to the theory or set of sentences in question, regardless of whether the speaker agrees with them or not. Matters of interpretation may sometimes come down to differences in beliefs.

Importantly, the charity principle should not be seen in itself as an interpretive form of imperialism, one which explains how the interpreter projects her/his own rationality on the alien one of the speaker and judges the latter by her/his own foreign standards. This assertion could only properly be made by a second interpreter who can somehow claim to have a better interpretation—which is not only possible, but quite reasonable in some cases. If the charity principle explains the imperialism of the first interpreter, then that means that the second interpreter must be able to use different means—not involving charity—to obtain a true or at least better understanding of the speaker's true rationality. But we do not know how s/he could do it. And, of course, if s/he could, then everybody else would be able to use the same methods and stop being imperialistic.

7.3.2 Interpretation Dependence in Critical Approaches

At the beginning of this chapter I mentioned that there is a relation between criticality and interpretation, that is reflected in that they both share readings of reality as their object of inquiry. And in that sense they both can be taken to be readings of readings of reality. But this relation is not accidental or superficial in any way, as I will try to show.

Interpretation and Criticality

I have argued before that any interpretation involves translated as well as related sentences, but that rational reconstructions make more visible the way in which less closely related sentences can be part of an interpretation. The farther away these related sentences in one's interpretation are from the translated sentences and in general from the issues that seem to be involved in the speaker's words, the more one tends to shift from talk of "s/he claims that..." to talk of "s/he seems to think that...", to talk of "s/he would have to accept that...", and furthermore to talk of "s/he couldn't possibly have known it, but her/his ideas imply that..." In all these cases one could be wrong in the attributions, but the least risky interpretive strategy would be to try to stick to sentences of the first kind—as is the case in, for instance, historical reconstructions. Now, a critical approach surely does not settle for this strategy. In order to make any distinctive contribution beyond what seems to be explicitly said by a speaker, a critical inquirer cannot restrict her/himself to only picking some of her/his sentences, to then produce a summary or a rephrasing in a nicer way. But if s/he wants to contribute some critical knowledge beyond the making of mere summaries, to instead establish relations with other ideas, point at marginalised issues not explicitly mentioned—or noticed—by the speaker and excluded from consideration, to unveil or reveal hidden assumptions, and so on, then s/he has to bring in and actively use some of her/his own [more or less welljustified] beliefs and carry out a critical reconstruction. This is so, regardless of whether or not the proponents of the critical approach claim it to be a form of immanent or internal critique⁵⁹ (see for instance Burbules, 1995, and 1998; and Biesta, 1998). Interpretation might be taken to be about meaning, while criticality to be concerned with [lack of, limits to, possibilities of, etc.] validity. However, the inextricability of meaning and beliefs makes it impossible to separate these two functions. A critical inquirer is always necessarily an interpreter.

Now, what kind of knowledge or beliefs by the interpreter, represented in related

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⁵⁹ If the argument I have presented is correct, immanent critique cannot be totally immanent in that any new critical knowledge about some linguistic manifestation, expressed in related sentences, carries the mark of the interpreter. There is no such a thing as a critique *from within*, in a strict sense. But this does not mean that critique is always imperialistic; for there is no clear way in which such a position can intelligibly be recognised, except for the philosophically less interesting sense in which an interpretation can be a bad one.

sentences in interpretation, is involved in criticality? The impossibility to find sources of conceptual or empirical certainty, the rejection of foundationalism and representationalism⁶⁰, and the separation of the problems of explanation and justification of knowledge (see chapter 5) imply that it should not, appropriately, be a form of epistemological knowledge. Indeed the above conclusions dismiss as meaningless and/or irrelevant most of the problems that define the traditional discipline of epistemology. The key seems to lie in the fact that related sentences, *because of their very relatedness to translated sentences*, manifest beliefs about whatever it is that translated sentences talk about—that is, about whatever the speaker more directly talks about, if the interpretation is minimally good. They might *also* deal with other issues and refer to other objects that the speaker may not have mentioned or considered, but only insofar as the interpreter believes that there is a relation between them and whatever the speaker has actually talked about.

This line of reasoning allows me now to argue that, at least when dealing with contents and the problem of validity, it is misleading to say that critical thinking stands on a different level as compared to other kinds of thinking (see for instance chapter 3; also von Foerster, 1984; and Midgley, 2000). Questions about observers are questions about the world. In particular cases, thinking about someone's reading of reality is only different from thinking about reality in the trivial sense that one will produce sentences about that person's beliefs, and perhaps not [directly] about whatever those beliefs are about. But one's beliefs about that are deeply implicated there. This is not another level, if different levels suggest some form of hierarchy and if one is not prepared to allow transitivity in the ordering of those levels. They are certainly varieties of knowledge, which bear important relations with each other (see Davidson, 1991). The focus of my argument here has been on the involvement of one's knowledge about reality in one's [critical or otherwise] knowledge about someone else's beliefs. But if, following Wittgenstein and others, one takes knowledge to be of a social character, then one will see the relationship as applying in both directions.

Another important point refers to the possibility of inescapability of critical knowledge.

⁶⁰ For the sake of clarity, the antirepresentationalism supported here takes *sentences* or *theories* to not have any representational content (see section 6.1.1). There is no such a claim regarding the status of names or descriptions, or non-sentential expressions in general (see Neale, 1999).

If in practice critical knowledge depends on and to a large extent is constituted by knowledge about reality, then it can be contestable in the same way that direct knowledge about reality can be. That is, if there is a problem about how to choose between alternative competing beliefs about reality, there will be a similar problem for choosing between alternative competing critical beliefs about a reading of reality.

<u>Interpretation in Non-Advocating Content-Full Theories of the Critical</u>

According to the argument in sections 5.1.3 and 5.1.4, interpretation independence is required by both content-full and content-empty theories of the critical if they are to prevent knowledge imposition. In the first case, it is mainly because they rely on interpreted readings of reality that they use as source readings, and it is them that I will discuss now.

One case of the first group is that of Total Systems Intervention (TSI), as it offers various systems paradigms as source readings of reality, without advocating any one of them in particular. For doing so, TSI provides an analysis of each of these paradigms by means of an examination of their assumptions about problem contexts, their strengths and weaknesses, and, more recently, their constitutive rules (see subchapter 3.4; also Flood and Jackson, 1991; and Jackson, 1991, 1999, and 2000). These elements can in general be regarded as coming from Jackson's and Flood's rational reconstructions of those paradigms; that is, of the ideas proposed by various influential systems thinkers, or of some ideal-type versions of those paradigms. As such, then, one would expect these to critically elaborate on the original ideas by those systems thinkers⁶¹.

Given that there cannot be interpretation independence, those rational critical reconstructions would depend on Jackson's and Flood's own ideas about what those systems paradigms talk about: the nature of systems, the nature of society, the nature of problems, etc. Because of that, different views on these topics can produce legitimate disagreements as to whether those are good critical reconstructions, as in fact has

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⁶¹ Checkland and Scholes do provide, however, a set of constitutive rules for soft systems thinking (1990), based on which Jackson then elaborates his proposed set (1999).

occurred (see the discussion in section 3.4.4).

Although in a less systematic way, something similar happens with some forms of critical pedagogy, but particularly when the various alternative forms of knowledge or perspectives are explicitly formulated. Those formulations, if my argument above is correct, would similarly constitute interpretations coming from the particular belief systems of the person doing the critique on them. The main manifestation of this conclusion, I think, appears in the impression we sometimes get that some descriptions of what someone else said are loaded.

<u>Interpretation in Content-Empty Theories of the Critical</u>

In content-empty theories of the critical, the requirement of interpretation independence is more closely associated with the possibility of imposition of particular interpretations of *target* readings of reality. What consequences does the impossibility of interpretation independence bring for these kinds of critical approaches?

One case of content-empty theories of the critical is the one referred to by theories used by most authors in the Critical Thinking Movement. As showed in subchapter 2.1, most of them rely on the possibility of reconstructing, out of informal speech and conversation, a more formal structure of an argument which can then be evaluated in terms of how proper its use of logic is. Importantly for this discussion, let us notice that this reconstruction of speech and conversation in terms of an argument structure is, effectively, a rational reconstruction. And as such, it is subject to all the considerations about interpretation discussed above.

But what is the argument that is to be fit into the argument structure? Specifically, where are the elements of that structure to be found in someone's speech or texts? Although in some cases a quick survey of the text or speech will produce these elements in a straightforward way, in most cases it is arguably not so. It is usually the case that not all the elements of the structure will be easily found, and then their postulation has to be made by the reconstructor—the critical person assessing the argument. From here the notion of assumption is derived, as a premise that is not present but lies tacitly in the

text, and which is required for the argument to be complete (see, for instance, Ennis, 1982; and Scriven, 1976). But there has been some discussion as to how that *gap* in the structure can properly be filled, with some authors even arguing that the very talk of assumptions should be abandoned. The problem seems to be that there is no systematic way in which one could determine the assumptions made, in a unique and warrantedly correct way (for instance see Ennis, 1982; Delin et al., 1994; Plummer, 1999; and Gratton, 2000). But it is not simply the identification of single elements which seems to be problematic. Identifying the whole argument seems to have its problems as well, as is evidenced in Scriven's (1976) and McPeck's (1981) claims that in most cases by the time one has finally established what the argument seemed to be, one has already done most of the assessment, based on one's own information and knowledge about whatever is being talked about.

This seems to suggest that the critical assessment of someone's ideas will be tied to their interpretation by the person doing the assessment, which, according to my argument, is tied to her/his own belief system. The problem appears when the interpreter passes her/his interpretation and the assessment that is linked to it, as *critical*, on the grounds that it is based on the theory of the critical provided by the approach. In this way, his/her reading of reality may be imposed. One manifestation of this can be seen in the complaints by Duhan Kaplan (1991) about how textbooks on critical thinking that she analysed—produced within the Critical Thinking Movement—promoted specific political ideologies by using the words of politicians and journalists of the opposing political party as examples of bad argumentation (see section 2.1.2).

In systems thinking, a paradigm approach of content-empty theories of the critical is Ulrich's Critical Systems Heuristics. What can be said about CSH in terms of the requirement of interpretation independence is similar to what I have just said about the Critical Thinking Movement. Any specific concrete answer to the questions about the boundary judgements implicit in a particular design of a social system will depend on the beliefs held by the person doing the critical analysis, and therefore the critical reading of boundaries will not be independent of the non-critical, so to speak, reading of reality—both of what is and of what ought to be.

7.4 SUMMARY OF THE ARGUMENT

In this chapter I have further developed the ideas in philosophy of language that I started to present in chapter 6. This time, however, the focus was on interpretation; that is, on the act of understanding the texts or utterances by someone else—the speaker. Again, the views presented here are mostly based on the philosophy of language developed by Quine, and most importantly Davidson.

One of the main results was the idea that interpretation requires from the interpreter the generation of sentences that s/he knows how to use. Within this result, one first important aspect consists in the fact that knowing how to use a sentence means knowing many other related sentences that follow from it, and their truth values. A second important element refers to the fact that for the interpreter to have correctly translated the speaker's sentence, s/he has to agree with her/him on the truth-value of many of those related sentences just mentioned. But, if we are to follow Quine and not draw a line separating the analytic from the synthetic, then no single related sentence has to be in the list of sentences about whose truth values the interpreter and the speaker have to agree. Or in the list of sentences that the interpreter has to know so that s/he can be said to know how to use the originally translated sentence. The key issue that all this shows here is, nevertheless, that in interpretation the interpreter cannot help using her/his own beliefs about whatever the speaker seems to be talking about; that is, her/his own reading of reality.

The above conclusion directly gives an answer to the question of whether it is possible to fulfil the requirement of *interpretation independence*, as defined in chapter 5. The answer is that it is not. That is, the interpretation of target or source readings of reality is not independent from the interpreter's own reading of reality. If this is so, then the "mere" presentation of forms of knowledge to the actors in a situation (e.g., the students in a classroom) for them to reflect about them cannot guarantee that knowledge imposition will not occur, for those forms of knowledge are the researcher's or the teacher's interpretation, and it necessarily depends on her/his reading of reality. However, the kind of imposition that might occur in this case would certainly be less

imposing than if the forms of knowledge had been actively advocated by the researcher or teacher, as is the case when there is an advocating content-full theory of the critical.

PART IV

8. ELEMENTS FOR A FRAMEWORK FOR STUDYING KNOWLEDGE IMPOSITION: ISSUES OF CONTENTS

Part III, consisting of chapters 6 and 7, can be said to have been written mostly in an analysis mode, trying to examine thoroughly various issues surrounding the possibility of preventing knowledge imposition. Part IV, however, is very different. I will now attempt to produce, positively, a system of ideas and concepts useful for the study of knowledge imposition in actual classroom pedagogical activities. As said in the introduction, this can be considered a framework. Now, given the results of part III concerning the impossibility to fulfil the requirements established in chapter 5, I make no claim here that all forms of knowledge imposition will be detectable by means of the use of the framework, and hence there is no guarantee that they can further be prevented. Instead, the purpose is to help any given group of participants in a space of interactions use the resources available to them to detect those forms of imposition and attempt to prevent them.

Part IV is divided into two chapters, one dealing with issues of contents, and the other with issues of interactions. As explained in chapter 4, elements of contents cannot be reduced to elements of interactions; and vice versa. This does not mean that there are no relations between them or that they are independent; it is just that talk of interactions cannot explain everything about contents, and vice versa. For this reason, aspects specific to contents in relation to knowledge imposition need to be developed separately; and that is the main purpose of this chapter. In doing this, attention needs to be paid to the problems examined in chapters 6 and 7 that were shown to affect the

various critical approaches dealing with the problem of knowledge imposition via the problem of validity. Here I will be trying to be consistent with the theoretical insights provided by the work of Davidson, Quine, and especially Rorty, in the philosophy of language. However, in this argument I will present certain features that do not appear explicitly in their work, and that can be said to effectively constitute a development.

Subchapter 8.1 will produce a conclusion about the role of criticality and the status of theories of the critical, based on the discussions in chapters 5, 6, and 7, and particularly the problems encountered concerning the justification of theories of the critical. In subchapter 8.2 I will develop an understanding of beliefs and assumptions that attempts to describe and explain what happens when a belief, sentence, or form of knowledge, is questioned. The concept of *assumption* will be particularly important here, but it will be reconstructed so as to take into account the problems mentioned in subchapter 8.1, as well as other aspects of the Davidsonian and Quinean philosophy of language advocated here. The purpose is to prepare the way for the next subchapter to show where criticality can be located. Subchapter 8.3, still in a discussion mode, explains some further aspects related to the question "of what kinds of things can we properly say that they are critical or uncritical—in relation to contents?" Finally in subchapter 8.4, which is dedicated to the summary, I will produce a brief and purely descriptive account of the elements related to validity and contents of the framework proposed here to understand criticality and the problem of knowledge imposition.

8.1 ABOUT THE ATTACHMENT OF CRITICALITY TO SPECIFIC CONTENT VALIDITY QUESTIONS

To recapitulate, let me now briefly list the problems referred to in the introductory paragraphs to this chapter. They will place restrictions as to what should be developed here or in the future with respect to the problem of validity in relation to knowledge imposition.

- 1. The use of source readings of reality to question a target reading implies a previous acceptance of those source readings, even if only partially. Given that they cannot be shown to be *inescapable* in any epistemological way—because of the impossibility of fulfilling the inescapability requirement (see chapter 6)—any approach defining critique in terms of that kind of questioning promotes their imposition in the name of criticality. And the very label *critical* would become a factor used to legitimise that imposition ("if it is better to be critical than not, then it is better to accept those source readings"). This problem affects all approaches with content-full theories of the critical.
- 2. If the questions provided by the theory of the critical are sufficiently open so as to not suggest too explicitly their possible answers—as is the case with content-empty theories of the critical—or simply do not deal with contents—as is the case of critical approaches dealing only with the problem of pedagogy—then there is the problem that the imposition of relevant knowledge from sources outside of the classroom cannot be prevented. This is due to the fact that nothing there guarantees that the issues related to the imposed knowledge will come up in the conversation, let alone that they will be questioned. In other words, the totality of possible relevant aspects and issues for discussion—and therefore of possible forms of knowledge that can be imposed—is not *given* (see chapter 6). It cannot be guaranteed that the imposition of specific forms of knowledge will be prevented, if these forms are not explicitly pointed out.
- 3. When various source readings of reality are used to provide critical questions (as sources of criticality) to be asked of target readings, the ways in which they are used and the questions developed depend on the interpretation made of those source and target readings, which in turn depends on the interpreter's particular reading of reality. Given the existence of this *interpretation dependence* (see chapter 7), the interpreter's own readings—or parts of them—can be imposed through her/his particular interpretations of the source and target readings. Here again, this imposition might become legitimised by the use of the term *critical* to qualify the acceptance of those interpretations.

The combination of these three problems, resulting from the simultaneous failure to achieve inescapability, givenness, and interpretation independence, will further imply

that the attachment of criticality onto specific validity questions of any kind is problematic. However, even though such attachment might prevent the imposition of certain forms of knowledge, it might also actively or passively promote the imposition of other forms.

Let me now explain why. The failure to obtain givenness implies that a theory of the critical dealing with validity should use specific forms of content which, when applied, do not depend on the particular reading of reality held by the person using it. Given that any practical application requires making use of [first-level] readings of reality, not using content would simply serve the purpose of legitimising her/his reading, by means of labelling it *critical*. This would not only be incorrect epistemologically, but also politically dangerous. This is the case of the approach advanced by the Critical Thinking Movement, and also of Critical Systems Heuristics.

Now, the failure to obtain interpretation independence further suggests that, given that interpretation is necessary when dealing with contents, any theory of the critical purportedly lying on a second-level necessarily has to make use of first-level readings of reality. Because of what was argued in the previous paragraph, however, not specifying the content represented by the first-level reading or by the interpretation of other first-level readings might be incorrect and dangerous. If it is specified by the theory of the critical, then the latter will be just like any reading of reality lying on the first-level of inquiry. And what would it have so special so as to think of it as being critical? Given the failure to obtain inescapability, then there is nothing other than its possible success in the conversation or inquiry itself that could make it special. But then, it becomes simply one successful reading of reality.

Once one accepts this, then it becomes clear that theories of the critical should not be deemed appropriate because of some philosophical or epistemological adequacy, or because they are critical. If they are considered good, it should be so because the firstlevel readings of reality they entail and make use of are shown to be better than their alternatives⁶². Second-level talk about validity is nothing more than first-level talk; usually constituted by the more abstract, generalising, or universalising claims. That

particular cases, by particular actors.

⁶² In the case of content-empty theories of the critical, this analysis would apply to their application in

condition, however, does not make them belong in a different dimension or level. As Sellars has shown, holding a sentence p true implies having other beliefs, and among these, that belief in p is justified (Sellars, 1956; see also chapter 6). This necessarily refers us back to more abstract and generalising beliefs; but that is simply part of what it is to speak a language and to hold a reading of reality at the first-level.

That content-full theories of the critical proposed in critical approaches do not have a special status means that they should be taken as just another reading of reality that might enter the conversation and/or inquiry.

8.2 ASSUMPTIONS AND LOGICAL SPACES OF Possibilities

The notion of basic or fundamental assumption appears, with different names and in different ways, in most of the approaches dealing with contents reviewed in chapters 2 Particularly, it appears in critical pedagogy, Critical Systems Heuristics, Interpretive Systemology, and Total Systems Intervention⁶³. Now, it further seems that this notion is constitutive of a more general view in which beliefs are seen as lying on top of other beliefs which support them, or constitute evidence for them⁶⁴. That is, a belief can be seen as being justified by other beliefs that are located at a lower level and that in that sense somehow provide a base on which it can stand. Following this very idea through, those supporting beliefs would in turn be justified or supported by other beliefs, and so on until reaching a point in which the beliefs in question are of a special kind that does not allow for further justification. In foundationalist accounts, as seen in chapter 6, these limiting beliefs are taken to be epistemologically given, and therefore certain. In non-foundationalist accounts, like those of the approaches mentioned at the beginning of this paragraph, it is said that those limiting beliefs simply cannot be

⁶³ In the Critical Thinking Movement the notion of assumption is central, but no distinction seems to be made between fundamental and non-fundamental assumptions.

⁶⁴ In what follows I will talk about beliefs and belief systems; however, the analysis should also be applicable to sentences in general, without the need to mention the fact that someone holds them true.

justified any further, and therefore must be assumed. If there were not such a stopping point, the argument goes, there would be an infinite regress like the one that preoccupied Descartes. Those last or ultimate beliefs, lying precisely at that stopping point—or, to use Ulrich's terms, *justification break-off*—would be the fundamental assumptions. For instance, these may be ontological and/or epistemological assumptions, or assumptions specifying the criteria of rationality or validity, or boundary judgements of a system design, or the a priori judgements that constitute a conceptual framework or scheme.

Importantly, in order to reveal those basic or fundamental assumptions, specific questions have to be asked; for instance questions about the epistemological position taken, or about the boundary judgements made. These questions are in most cases the sources of criticality provided by the proposed theory of the critical, and the possible answers to them are the possible assumptions made by the target reading of reality that is being critically questioned⁶⁵. The logic of the questions, so to speak, determines what its possible answers may be.

The idea of a division between some beliefs which constitute a framework or basis—and which are thus fundamental assumptions—and others which are not, is central to what Davidson termed the *scheme-content distinction*, and then criticised on grounds of its unintelligibility⁶⁶. In the particular cases in which this framework is totally conceptual, it would further rely on the *analytic-synthetic distinction* that Quine argued was problematic. Given that these distinctions are rejected within the philosophical view advocated here (see chapters 6 and 7), given also that assumptions play a central role in criticality as understood in many approaches, and given that theories of the critical do not have a special status different from that of any other reading of reality, the questions I will address now refer to what criticality will mean and to what role assumptions will play in it. The answer will have to give up recourse to a scheme-content distinction and to the idea that we are "operating within a logical space in which all possible descriptions of everything [are] already at hand" (Rorty, 1988a, p.95).

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⁶⁵ Particularly in radical pedagogy, other sources of criticality are related to the interests behind the claims made by any person or group.

⁶⁶ Just as a clarification, the distinction between both types of beliefs is not the same as the distinction between scheme and content, because content is supposed to be not yet formulated in terms of beliefs. But it is normally based on it.

8.2.1 Beliefs and Logical Spaces of Possibilities

A belief is a sentence that someone holds true, which specifies what is the case. Now, the holistic insight that having a belief implies having many other beliefs has been repeatedly mentioned throughout this document. For the purpose of the discussion that now follows, among the beliefs entailed by any one belief that specifies what is the case, I am specially interested in those that specify what is *not* the case. One special instance of this is represented by the fact that, as Quine has put it, "we cannot know what something is without knowing how it is marked off from other things" (1969, p.55). For example, we would normally understand the sentence "that is a small triangle", when uttered by a speaker while pointing at a figure drawn on a piece of paper, to at the same time entail sentences like "that is *not* a big triangle" and "that is *not* a two-sided figure". That is, our understanding of the original sentence implies that we take it that if it is true, then these other sentences must be true as well and for the same reasons. Moreover, we also take the speaker to agree with us, for otherwise perhaps it would be better to conclude that s/he uses the words *small* and *triangle* differently from us, and that the original interpretation was wrong.

But let us notice now that these related sentences above express the rejection of possible alternatives to the one directly attributed to the speaker. That is, by understanding the speaker as having endorsed a particular proposition, the interpreter will have also understood her/him as having rejected a number of other alternative propositions. Given the above, a sentence can then be understood as a choice from among a set of alternatives; or, in other words, as an answer to a question, a question about which of those alternative possibilities is right. A claim is, then, an act of narrowing down the selected options from a larger space of possible options. In the hermeneutic sciences, this idea represents a fundamental insight as suggested by Gadamer: Any belief, argument, theory, or belief system, is the answer to a question—understood in a broad sense—and a question presupposes the existence of different possible answers. Because of this, "it is the essence of knowledge not only to judge something correctly but, at the

same time and for the same reason, to exclude what is wrong. Deciding the question is the path to knowledge" (Gadamer, 1986, p.364). Interpretation is therefore about the recognition of the question, the alternative answers for it, and the one finally chosen.

Interpretation always involves a relation to the question that is asked of the interpreter. To understand a text means to understand this question (....) We understand the sense of a text only by acquiring the horizon of the question—a horizon that, as such, necessarily includes other possible answers. (p.370)

I will call the range of those alternatives, a *space of possibilities* for the question. For the sake of clarity, let me point out that these alternatives do not necessarily have to be finite or susceptible of being counted, and one does not have to have them all present in one's mind when interpreting the claim and the question. They are, nevertheless, present in the sense that a speaker or an interpreter take it that they are entailed by the claim. They are also important in the sense that a good reason for accepting the claim will be, at the same time and for the same reasons, a reason for rejecting the other possible alternatives in the space. Let us further notice that, due to the fact that the analytic-synthetic distinction cannot be drawn, the space of possibilities for a same belief may vary from one person to another, even if we accept that the interpretation by both is correct. No doubt they must greatly overlap, for otherwise interpretation could not take place, but in general they depend on the beliefs that the persons in question hold about whatever domain the sentence belongs to. In the example above, they depend on each person's beliefs about triangles and size, contextualised as appropriate.

8.2.2 Assumptions as Limits to Spaces of Possibilities

Apart from the idea of *ultimate foundation* on which a belief system stands, in the fields of formal and informal logic the concept of *assumption* has come to have a very concrete meaning. There, it refers to unstated premises in an argument, which are needed in order for the argument to be valid (see for instance, Ennis, 1982; Walton,

1989; Delin et al, 1994; Levi, 1995; Plumer, 1999; and Gratton, 2000). The origin of this conception may be traced back to Aristotle's enthymemes: that is, syllogisms in which one premise is missing. It is, however, limited to the context of an argument in the strict sense, which is constituted by a claim and a set of reasons adduced in its support (see Missimer, 1995b).

The idea of being a missing or unstated premise suggests more clearly something that is common to the many varied uses of the word *assumption*: That the validity of some sentence, theory, or belief system, is seen to depend on that of the assumptions made⁶⁷. This way, in the simplest case, an assumption is a sentence that has not been made explicit, but which would warrant, or at least support, the validity of a claim or of at least some aspect of it. That is, according to the discussion in the previous section, it would warrant the validity of the choice made from a previously existing space of possibilities. If the assumption made turns out to be false, then the conclusion or claim will not be warranted, or might even be proved incorrect.

But all this in itself presupposes that all the relevant and adequate possibilities are already available at hand, and that the purpose of the assessment is to find the correct answer to the question that defines the space of possibilities. This is not always appropriate. For one thing, there are obvious cases in which the space of possible alternatives entailed by a claim seems inadequate, and as a consequence the claim can be judged neither true nor false—and the question cannot be answered. Consider "the wallet that Mario stole yesterday was mine". In many contexts—but not in all, though—the alternatives considered by a speaker advancing such a claim would be likely to describe the different possible owners of the wallet stolen by Mario. If Mario did not in fact steal a wallet the day before the claim was made, the claim's presupposition that Mario effectively did is false, and therefore it can be said that the space of possibilities is inappropriate. Or, in other words, that the question about the owner of the wallet stolen by Mario—or about whether it was the speaker's wallet—is inappropriate, and in some sense meaningless. That question cannot be properly answered, and instead it should be replied to by questioning the assumption it is making—that is, its presupposition. It has long been acknowledged that sometimes a

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⁶⁷ Strictly speaking, it is only the validity of the particular argument which depends on the assumption. One claim might still be true even if a particular argument expressed in its support is invalid.

question cannot or should not be answered, as in the typical example of the so-called *fallacy of many questions*: "Have you stopped beating your spouse?" The problem, it has been noted, is that by answering the question the respondent accepts having beaten her/his spouse in the past, and s/he might not be willing to do so (for an analysis of this fallacy, see Walton, 1989). Similarly, when someone judges a sentence true or false, then at the same time s/he is accepting the presuppositions implicit in it and in the question that it is an answer to.

Consequently an interpreter may well reject a claim, without judging it true or false, on the grounds that at least one of its presuppositions is not acceptable; or, in the terminology being used here, because the space of possibilities considered is too narrow or simply badly conceived. But let us notice that for an interpreter to think of the question in this way, is for her/him to have envisaged possibilities beyond the space originally conceived by the speaker. In doing this, the interpreter is at the same time effectively representing a boundary or limit that separates the possibilities acknowledged by the speaker from those others s/he can additionally imagine but the speaker apparently has not considered. In the interpreter's eyes, then, at this moment, the speaker appears as having made an assumption by having consciously or unconsciously reduced the space of possibilities. The assumption might still be a correct one to make, if the reduction is seen as warranted.

Moreover, the interpreter will now see the speaker's claims as having a certain *scope*—understood as the volume of the space of possibilities considered by her/him, as seen by the interpreter. It is perfectly possible that the speaker had actually considered those other possibilities that the interpreter is now pointing out, but that for some reason, rhetorical or otherwise, s/he did not make them explicit (see for instance Ennis, 1982). However, the opposite is also possible: that those possibilities had strictly speaking not previously been part of the speaker's belief system. In this latter case, their pointing out by the interpreter will effectively produce an expansion of the space of possibilities considered by the speaker; that is, *an expansion of the scope of her/his belief system*.

To repeat the point, what is particularly important for this discussion is that the disclosure of those assumptions can only be made if the interpreter can envisage some possibilities lying beyond the space originally considered by the speaker's question.

The limits only effectively appear once there has been an encounter with those additional possibilities which, in the example, were brought forward by the interpreter. This dependence on being able to imagine alternative possibilities suggests that, as Delin et al have remarked, "assumption seeking (...) would involve creativity at least as much as logic" (1994, p.118).

Now, while an expansion of scope and the disclosure of assumptions may in some cases make the speaker abandon some aspects of her/his beliefs, it does not necessarily have to always be this way. For instance, s/he may grant s/he had made an assumption, but consider it a valid one. In this case the ideas associated to the newly visible possibilities become incorporated into the belief system, even if only to reject them. Or s/he might think that the validity of the original claims has to be restricted to certain contexts. But the decision of what to do in the face of the newly disclosed assumptions is just part of the inquiry, like anything else. That is, the decision of what to do depends on the same careful consideration of reasons that inquiry should always involve, and not on some theorisation at a philosophical or meta-level.

These considerations are perhaps made clearer by an example: Consider the sentence "the punishment Juan deserves is expulsion". There are many different ways to react to this sentence. For instance, (i) one may agree with it and the reasons given by the speaker; or (ii) one may disagree and think Juan deserves a different punishment (e.g., because of the nature of the offence); or (iii) one may think that Juan doesn't deserve a punishment this time (e.g., because in one's view he did nothing wrong); or (iv) one may perhaps think that in general people like Juan cannot be said to deserve punishments (e.g., because given his age, or his condition, he should not be held responsible of his actions); or (v) one may even think that in general it does not make sense, or that it is not intelligible, to think of people as deserving punishments (e.g., because of one's ideas on determinism and the nature of human agency). If one does not directly agree or disagree with the claim—as in (i) and (ii)—then it may be because one is willing to question the presupposition that Juan deserves a punishment. But this questioning may still take various different expressions: In (iii) and perhaps also in (iv) the presupposition is taken to be false, but in (v) it is taken to be unintelligible. Actually, in (iv) there is another presupposition that the interpreter may more usefully postulate and directly question; namely, that Juan belongs to the category of people who

can be held responsible for their actions, or perhaps alternatively that everybody should be held responsible for their actions. Similarly, in (v) a better and more discussible because intelligible—presupposition that can be postulated is that it makes sense to think of people as deserving punishments; or, better, that people's behaviour is not deterministic. But let us notice that for an interpreter to react as depicted in (iii), (iv) and (v)—and in some cases as depicted in (ii) as well—s/he must be able to envisage alternatives lying beyond the space of possibilities originally considered by the speaker, alternatives like Juan not deserving a punishment, or a radically different description of people's responsibility and agency without the notion of deserving a punishment. In all those cases, and precisely for that reason, the interpreter will have regarded the question "what punishment does Juan deserve?" as a bad question, and will have formulated its presuppositions in different ways. Moreover, there must be many possible reactions to the original sentence other than the ones described in (i) to (v). Indeed, as there is no limit to the ways in which alternative possibilities can be constructed, there is no limit to the number of possible ways in which the presuppositions of a claim, theory, or belief system can be formulated.

Perhaps it should be noted that Delin et al (1994) have similarly argued, based on a somewhat psychological analysis, that assumptions are not intelligible when taken as entities, propositional or otherwise, and have suggested that they are best thought of "as being, not a positive proposition, but some sort of *limitation* or *circumscription* of the thinking process, or the field that the thinking process concerns itself with" (p.117, my emphasis). What I am adding to this view is that that limitation or circumscription is formulated in one way or another depending on the interpreter and the alternative possibilities that s/he can envisage.

A similar idea is presented by Rorty in his discussion of the attempt by some feminists to create a language in which we hear "what women as women have to say":

Assumptions become visible as assumptions only if we can make the contradictories of those assumptions sound plausible. So injustices may not be perceived as injustices, even by those who suffer them, until somebody invents a previously unplayed role. Only if somebody has a dream, and a voice to describe that dream, does what looked like nature begin to look

like culture, what looked like fate begin to look like a moral abomination. For until then only the language of the oppressor is available, and most oppressors have had the wit to teach the oppressed a language in which the oppressed will sound crazy—even to themselves—if they describe themselves as oppressed. (1991a, p.203)

As he has further remarked, when radically different vocabularies are compared, many aspects distinguishing them make more sense if expressed as differences in the questions asked, as opposed to differences in the answers given to common questions (Rorty, 1989b). This does not mean that no common questions will be found, though. Indeed, if different questions are identified as portraying different aspects of both vocabularies, then it is because some common questions have already been identified, perhaps at the level of presuppositions. But when a well-built and coherent system of propositions is not yet available to the interpreter, then it may be very difficult for her/him to formulate and question the relevant speaker's presuppositions. It is in these terms that I think it is possible to understand Frye's description of her own feminist work on the creation of a new language which rejects the picture of women as portrayed by men, as "a sort of flirtation with meaninglessness—dancing about a region of cognitive gaps and semantic spaces" (Frye, 1983, p.154).

Now, when producing an argument, a speaker can only hope to have covered all the possible relevant alternative possibilities, so that s/he is prepared to support any presuppositions in her/his expressed ideas. But the main problem s/he faces consists in the fact that it is impossible to know in advance all the possible alternatives. The reason why this is so is that spaces of possibilities are not worldly objects, things that can be observed or discovered; and neither do they correspond to objects or things in the world (e.g., to facts). They belong to the human activity of using language and therefore they are developed along with changes in the ways humans use language. As Rorty says, and as already quoted, scientists—and humans in general—should not be thought of "as operating within a logical space in which all possible descriptions of everything [are] already at hand" (1988a, p.95).

8.2.3. The Relationality of Assumptions

Now, given all this, what happens with the critical imperative of making one's fundamental assumptions explicit? This imperative seems to take it that they constitute not only a finite set, but also a reasonably small one, and that they can be discovered in a systematic way by means of critical inquiry. If so, then, which are the fundamental assumptions whose disclosure is particularly significant? In most cases—but not all, though—critical approaches will be based on some theorisation which will specify the assumptions to be revealed, and which will furthermore argue why they are the fundamental ones.

There is, however, something problematic about this notion of *fundamentality*. Assumptions, just like the claims they support, are assertive sentences specifying what is or should be the case. And, according to the discussion in the previous section, understanding what is being asserted by an assumption or any other sentence implies locating it in a space of possibilities, as constituting a choice. Suppose an interpreter postulates that a certain speaker is making an assumption. As mentioned before, doing so means that s/he envisages some possibilities lying beyond the space considered in the piece of knowledge espoused by the speaker, and represents her/him as having made a selection. Additionally, the assumption attributed to the speaker by the interpreter will represent a choice between the possibilities in the original space and those in the space envisaged by her/him. In doing so, the interpreter is effectively considering a new and perhaps broader space of possibilities, and locating in it the assumption made in the speaker's piece of knowledge. Now, another interpreter—perhaps the speaker her/himself—may regard that new space of possibilities as being restrictive or badly conceived in some way, and therefore possibly the assumption as wrongly formulated. And here one may well ask: What happens then with that assumption originally attributed to the speaker by the first interpreter? Is it still sensible to claim that s/he was making it? Very possibly not, at least according to the second interpreter. In the terminology developed in chapter 7, any description of assumptions made by a theory or belief system is constituted by related sentences added by the interpreter, perhaps a critical one. But related sentences depend in a deep way on the interpreter's own belief system.

An example will be useful to clarify this. In systems thinking it is common to distinguish hard systems thinking from soft systems thinking; but this distinction came to be used in particular when the latter was being developed. Among the proponents of soft systems thinking, Peter Checkland has provided a description of hard systems thinking as being based on certain assumptions. One of these assumptions is that systems exist out there in the world. He contrasts this idea with an alternative one, which is more used in his own approach, that systems exist as constructions in the mind, or in the world of ideas (see Checkland, 1981 and 1995). But the attribution of this assumption to hard systems thinking and its contrast with the alternative option used in soft systems thinking, are in themselves based on a certain body of knowledge with which one may or may not agree. For instance, it can be argued that the distinction between things out there and mental constructions is only meaningful if one takes knowledge to be representational (see Rorty, 1991b). Not accepting representationalism might imply that one may redescribe or reinterpret the differences between hard systems thinking and soft systems thinking in a different way. But could this description of Checkland's position as representationalist be, in turn, wrong? Of course, and that is still part of the conversation. The point is, let me emphasise it, that when an interpreter postulates that some assumption is being made by some theory of belief system, this postulation is dependent on what s/he believes about the object or inquiry. By pointing at an assumption made by some theory of belief system, one is not revealing its essence in any deep or transcendental way; that is, one has not really changed to talk at a meta or philosophical level. One is simply participating in the conversation and pointing out what are, in one's view, some implications of the other person's adopted beliefs.

It might be said, of course, that an interpreter may sometimes get things wrong when revealing assumptions in a form of knowledge. But let us notice that this critical act of revealing fundamental assumptions was supposed to help us deal with the inherently problematic nature of the way we understand the world, of the way we read reality. But then in what sense is the act of revealing assumptions different from knowing reality such that the former can help us deal with the problematic nature of the latter? That is, is critique any less problematic than reading reality, or philosophy any less problematic than the other areas of culture and knowledge? My answer is that it is equally problematic, and the reason is that the interpreter's critical act of revealing assumptions

depends on her/his own reading of reality. Or in other words, the reason is that there is not interpretation independence.

I would like to highlight now one further consequence of adopting this picture of fundamentality. If one declares some sentences as belonging to that special kind of fundamental assumptions, then this implies that one takes the associated fundamental question to be transcendentally valid; that is, essential for thought and rationality while at the same time exhausting all possibilities. Moreover, it also implies that one takes these questions to represent "perennial, eternal problems—problems which arise as soon as one reflects" (Rorty, 1979, p.3). But one may well have reasons for thinking that even those *fundamental* questions may be restrictive or badly conceived. For instance, one may think that one does not need a metaphysics (as Dewey thought, see Arcilla, 1995), or an epistemology (see Rorty, 1979), or that criteria of rationality or laws of logic are not so much rules that we try to follow, but descriptions of what we presently do when thinking or arguing (as Goodman thinks, see Rorty, 1994). To get to the point, the impossibility of there being something fundamental comes from the fact that both the assumptions and the questions they are answers for are discussable. If they are discussable, then that means that those questions cannot be ultimate, representations of problems that appear "as soon as one reflects". Moreover, their discussion would bring in issues from beyond the question itself. The question, then, and its possible answers, have to depend on something else. And here is, again, the holism of meaning and beliefs.

Assumptions made in a theory or belief system are revealed, then, not by means of a systematic reflection guided by some philosophical theorisation provided by a critical approach, but by the actual practice of study into whatever is the object of inquiry. What enables their disclosure is not a meta-theory, but theories which differ from the piece of knowledge in question. And the different differences will enable the disclosure of different assumptions, as they will produce different descriptions of the limits of the spaces of possibilities as considered in the piece of knowledge in question. All this implies that there cannot be such a thing as the set of assumptions of a theory or belief system, something to be discovered once and for all by means of critical reflection or inquiry. Instead, there are interpretations in which it is described as setting some limits, and reinterpretations in which it will be described differently and which may as well

conflict with the previous descriptions. Assumptions are in this sense relational: They exist only inasmuch as there are alternative pieces of knowledge considering different spaces of possibilities. While still attributable to individual theories or belief systems, assumptions exist because of their relation with alternative ones⁶⁸.

8.3 THE RELATION BETWEEN CRITICALITY AND CONVERSATIONS BETWEEN BELIEF SYSTEMS

Criticality in its sense of inquiry into the limits of forms of knowledge, is well represented by the notion of disclosure of assumptions. In the way of understanding assumptions that I am proposing here, their association with limits to spaces of possibilities considered in reasoning puts them even closer to this ideal. However, if my analysis above is correct and assumptions are relational, then the engagement with alternatives is necessary for the possibility of disclosing assumptions made by a theory or belief system. But of course this does not simply mean that the contrast with *any* alternative belief system will reveal those assumptions (as is predicated for instance in Interpretive Systemology, see Fuenmayor, 1990), for which assumptions are disclosed depends on the particular belief system engaged with. This centrality of the idea of engagement highlights an element of central importance in the study of criticality: *conversation*.

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⁶⁸ This situation is analogous to, for instance, that of someone who lends money and in so doing becomes a lender. S/he is only a lender insofar as there is someone else who borrows from her/him, and in that particular relation or those in which s/he actually or potentially lends money. Fodor and Lepore (1992) call this relational property *anatomic*, as opposed to *atomic*.

8.3.1 The Location of Criticality

Critical Conversations

The importance of conversation between belief systems, as well as the problems already discussed related to the association of the adjective *critical* with specific beliefs and with specific questions at whatever level—first-order or second-order—suggests that the question "what can/should be called critical or uncritical?" should be asked again. The answer will depend, at least when talking about the problem of validity, on what it actually is to find and reveal possible limits, sources of partiality, and assumptions underlying theories or belief systems. The discussion of the previous section suggests that these acts are located in conversations between belief systems. Now, given that not any conversation will do, those in which the disclosure of limits and assumptions occurs can be differentiated from those in which it does not. That is, conversation is granted the status of being a necessary condition for criticality, although it is not sufficient. However it still is the space where criticality can appear. In this sense there might be critical and uncritical conversations.

The discussion also very clearly suggests that the knowledge produced should not be called critical. The most that can be said if an encounter is critical is that the scope of the belief systems involved in the engagement will have expanded. Due to this, the only sense in which a particular form of knowledge which is the product of a conversation could be properly called critical, is relative to that specific conversation. In this sense, the making explicit of the relativity of critical knowledge might act as a warning over the importance of a continuous dialectical engagement with other belief systems—which is not, as previously argued, the same as engagement with other people. Furthermore, given that the resulting knowledge produced by someone has been shown to depend on her/his original belief system/s, by making this explicit the danger of legitimising a particular reading of reality by giving it or parts of it the label *critical* is avoided.

The notion of criticality proposed here can be seen as playing both a positive and a

negative role at the same time. Let us recall that, for example, Ulrich's CSH approach (see subchapter 3.1) adopts a negative conception of criticality as absolute limits to reason and, more concretely, to systems design. Instead, here I acknowledge that due to the fact that the givenness requirement cannot be fulfilled, there is a positive contribution to belief systems from criticality, and which specifically consists in an expansion of their scope. This takes into account that all the relevant issues for a situation are not known until they are pointed out, and that coming to recognise more issues effectively occurs only when a critical conversation between belief systems takes place. Nevertheless, a negative role in the spirit of Ulrich's Kantian conception of critique also exists within this proposal in the form of the question about whether conversations between belief systems have not proceeded critically.

Now, these positive and negative roles both characterise conversations [between belief systems] as being more or less critical. But the very notion of [un]critical conversation suggests that it is possible to attempt to inquire into the way a conversation takes place, in order to try to establish how critical it is. This very inquiry constitutes in itself a critical act. Let me call these two modes of criticality, *object* and *inquiry*. The *object* mode corresponds to the idea that conversations between belief systems may be critical or not—or more or less critical—depending on whether the scopes of each of the participating belief systems are mutually enhanced by means of the disclosure of assumptions. The *inquiry* mode, instead, refers to the idea that an act of inquiry or reflection on whether some particular conversation between belief systems is a critical conversation, is critical in itself.

There is however, a major reason why this general notion of criticality should be considered a very mild one, without all the philosophical transcendence usually attributed to it. The reason is related to the failure to obtain the interpretation independence requirement: Alternative belief systems are not there for the taking, unproblematically available in an interpretatively neutral way. Knowing them, or simply pointing them out, also depend on the belief system from which this activity is carried out. In this way any declared form of criticality can only be said to belong to the very local context constituted by the specific belief systems involved in a conversational encounter. And in this sense, criticality cannot be externally determined.

Is Criticality Necessarily Social?

It is important to emphasise that the conversations I have been referring to in the previous section are those between belief systems. They have not been defined as conversations between persons. Now, in the previous chapter I argued for the doctrine of the irreducibility of issues of belief systems and contents to issues of persons and interactions between them, and vice versa. One reason for this is that it cannot be totally predicted what other people's views are or might be before asking them, and that different readings of reality may be available to, and used by, one and the same person at different times.

This result has an important consequence when it comes to decide whether a form of criticality based on conversations between belief systems is necessarily social. In a strict sense it is, given that, as it is widely recognised, all forms of language are social and it makes no sense to speak of private languages (see Wittgenstein, 1953; also Davidson, 1991). However, the point here is somewhat different. I am making the assumption that there is at least the need for one person to do the reasoning, in order to have a critical conversation, and it is granted that the belief systems used and available to that person have been constructed socially. But the question here is whether at a specific time this person needs at least someone else to provide a belief system which is alternative to hers/his (namely the other person's).

Now, in the previous section I made the claim that criticality can only be declared in the very local context of a specific encounter between belief systems. This means that in answer to the question in the previous paragraph it has to be said that what is needed is only that encounter. And the encounter appears whenever the person has been able to recognise the alternative belief systems that meet in it. And let us notice that an implication of all this is that at a specific moment in time a person may have recognised those belief systems, without the need of someone else there to make one or more of them explicit to her/him. Therefore, s/he will have been able to do it on her/his own.

This suggests that an individual can carry out on her/his own a critical conversation. For instance, this might occur whenever someone makes use of the proposal recently

advanced by TSI, of using the various alternative systems paradigms as source readings to ask critical questions (see Jackson, 2000). It could be argued that, anyway, this person would have had to engage in conversation with the proponents of TSI, perhaps through their books and papers. But once [some or all of] these ideas have become part of that person's belief systems, that conversation is now in some sense over. This way, in an intervention s/he may now critically reflect on some of her/his own or other people's ideas about a situation by formulating questions derived from her/his knowledge of the various systemic paradigms, thus effectively producing a critical conversation. And let us notice that this implies that *during the intervention*, a dialogue with another person does not necessarily need to be held in order for her/him to do so. Moreover, neither is dialogue needed in creativity processes in which alternative possibilities can also be brought forth.

8.3.2 Decentering and Two-Way Conversations

The distinction between source and target readings of reality separates belief systems according to the specific *role* they play in the critical act, as proposed by the various theories of the critical. In the context of problem of knowledge imposition, both kinds of readings were identified as presenting the danger of being imposed. In the case of target readings, they might be imposed through the lack of an action to point out and question those forms of knowledge. In the case of source readings, it is the very active use of the theory of the critical which might promote that imposition.

When understanding the critical act in terms of the concepts and ideas discussed in subchapter 8.2, and particularly taking into account the relationality of assumptions, the source and target readings are nothing more than the belief systems engaged in a conversational encounter. Their source and target roles are only defined by the relation that is established between them *in a particular critical move*. But in this move, it is only the target reading that will be critically questioned and, at least in an explicit way, it is only presuppositions made by it that will be disclosed and made public. That is, even though the resources for critically questioning the source reading are there—for

the only requirement is that there is an alternative to it—its adoption of the role of *source* implies that there is some asymmetry in the critical act that defines that it will not bear the burden of proof, and that it will not be asked to respond to the questioning.

Let us recall that in section 7.2.3 I described an asymmetric relation in conversations between belief systems; namely the rational reconstruction. In a rational reconstruction someone defines some issues and questions as relevant, to then establish the reaction of someone else's belief system in those terms; that is, in terms of the position it is seen to adopt towards those issues and the answers it is seen to give to those questions. Their formulation, as I have argued, is not critically, metaphysically, or epistemologically neutral, but is based on a particular belief system. Now, the act of rational reconstruction more clearly defines the two roles of source and target readings, because it gives a direction and determines which belief system is to be asked questions, and which is to ask them. As seen in chapters 6 and 7, a problem with some theories of the critical consists in their assumption that there is no belief system behind the questions they propose, and therefore also in the fact that their demand to accept those questions in the name of criticality becomes a demand to uncritically accept the belief system behind them: In fact, this is the reason why they themselves can become imposed, in spite of the possibility that they might be at the same time contributing to the prevention of other forms of imposition. Because of this, the prevention of the imposition of the two forms of knowledge represented by the source and the target readings of reality requires that the critical act take place in both directions; that is, that both readings be used for making a rational reconstruction of each other. Thus, on the one hand criticality will be exerted between them, rather than upon them by some external theory of the critical (see for instance Jackson, 1999); and on the other no single reading of reality will be given prevalence in the name of criticality.

Now, in terms of the present discussion, the imposition of a source reading of reality occurs when rational reconstructions only occur from one belief system which now becomes a *centre*. This centre would be the place where the sources of criticality are seen to emerge from, to be asked of other belief systems located in the margins. When the critical moves are carried out in the two directions, as regards any particular conversation between belief systems, criticality can be said to have been effectively *decentered*.

8.3.3 Belief Systems Entering the Conversation

In a conversation, a failure to consider certain specific questions and/or issues about a belief system would be a mark of a lack of criticality, and of the possibility that knowledge imposition might be taking place or might be maintained if already existing. In the worst case, the conversation may simply not have occurred, and as a result none of the issues and questions formulated by a belief system will have been considered by the other. In this sense, the most uncritical conversation between belief systems is that conversation which has not been had.

As seen in chapter 6, a problem with content-empty theories of the critical is that specific forms knowledge being imposed might not be pointed out by them, and therefore be questioned, for it cannot be guaranteed that they will be made visible in interpretation. Therefore specific contents are required to point at those forms of knowledge. This way, for instance, a failure by the students to reflect on the issues that Freire suggested and used in his pedagogical practice might mean that the dominant views about those issues will remain unquestioned and uncritically accepted by them. In terms of the argument presented here, that failure is the result of not setting in critical conversation the systems of beliefs held by the student with Freire's proposed Neo-Marxist belief system, both about a particular set of [socio-economic] issues and about other views on those issues—for example the so-called dominant views. identification of particular belief systems that may be relevant but that have not been addressed, is the critical identification—this time in the inquiry mode of criticality (see section 8.3.1)—of conversations that have not been had or that have been had in an uncritical way. This would be apparent when one notices aspects or issues that have not been taken into account for questioning a belief system.

The problem that appears of the belief systems whose issues might not be taken into consideration, raises the question of how to determine which ones should enter the conversation. A first answer might be that ideally all relevant belief systems should

enter the conversation—even if it is impossible in practice, justifying the need for a negative critical solution (see Ulrich, 1983). The problem with that answer consists in the fact that there is not such a thing as all the possibly relevant belief systems. This is due to the fact that, as seen in subchapter 8.2, the logical space of possibilities is not bounded. However, keeping the unboundedness of the logical space of possibilities as an ideal, and with it also the expansion of the scope of the belief systems endorsed by those participants in the situation, the issue should turn now to the belief systems that could possibly be engaged in conversation. A starting point is the belief systems endorsed or considered plausible by each participant in the interaction—in our case most usually teacher and students—that are more immediately available to them. That is, given that it is them who will produce the conversations, critical or otherwise, the belief systems from which they understand situations and interpret other people's views will always have to be present. As these belief systems may not appear articulated in a neat way from the start, there might be the need for a space in which they have the opportunity to be formulated. This formulation process can be seen as an inquiry by each participant into her/his own life, practices, and beliefs, in a particular domain.

I take it that it is relatively clear that the participants' endorsed belief systems are necessary in the consideration of criticality, given that it is them who will produce the critical conversations; nevertheless, it is not so clear which other belief systems should be included as well. As I have already argued, they should not really be specified in advance in a fixed way—for example relying on some non-advocating content-full theory of the critical. Instead, we should think of this problem as a question to be asked and answered by the various participants. In order to clarify my position here, let me say that I think that non-advocating content-full theories of the critical might be very useful for this purpose. I am only warning against relying on them in an uncritical way, and therefore suggesting that the critical requirement be formulated as a question. In reality, it will be at least two different questions: In trying to address this issue, the separation between aspects of contents and aspects of interactions might prove valuable, if only to be able to ask in every situation two different questions that in many cases might give different but complementary answers. The one that I am interested in in this chapter, is the one that corresponds to issues of contents, and that as such is expressed in terms of belief systems or, in the same mode, of issues, questions, and propositions. The other question, which will be discussed in chapter 9, corresponds to the problem of interactions and as such is expressed in terms of persons, groups, and roles. The question of concern here can be expressed in a very general way as "what other alternative belief systems are there, or could be created, that it would be worth considering?" This time those belief systems will be those less easily or less immediately available to the participants; and again, the process of their formulation can be seen as occurring within a particular space or part of the inquiry process. Now, there is no need to place a restriction concerning the degree of development of the belief systems that could be used for engagement in critical conversations. That is, in some cases these might not have previously been developed in a neat and solidly coherent way at all, and could be apparent for any one of the participants in conversation in the form of a mere intuition. The words by Frye about her own feminist work as presenting "cognitive gaps and semantic spaces" (already quoted in subchapter 8.2) might be interpreted as just such kind of belief system. In those cases, the process of inquiry to find other non-immediately available belief systems can also become a process of tentatively creating or developing them.

Of course, as explained in chapter 6, the impossibility of interpretation independence suggests that the answer actually given to this new question by any one person will be limited by the scope of the belief systems available to her/him. In the case of the pedagogical situation in question, the process in which it is determined which other belief systems should enter the conversation should benefit from the combined scopes of the belief systems of all the participants. One effect of not using every participant's belief systems to determine this, will consist in some of them declaring the failure of the inquiry process to take into consideration certain aspects, issues, or propositions. Now, even in the event of using this combined scope, any external or non-participant observer of the process might still be able to imagine possibilities lying beyond the spaces of possibilities considered in the conversation, and therefore identify issues and aspects not reflected on. In such a case the external observer would simply be identifying conversations between belief systems that were not had or not had critically. This possibility is inevitable insofar as it is not possible to achieve any form of epistemological certainty (see chapter 6), and it shows a cautionary sense of the idea of criticality as restricted to particular conversations between belief systems. The point is that other audiences, in some cases perhaps separated from us in time and space, might think of us as having made incorrect assumptions that we had never thought we were making—and they might be right!⁶⁹ But this sense of inevitability also underlines the need for engaging new belief systems as one refines one's own, in the expectation that there might be something good in those possibilities that lie beyond the limits to the space covered by one's belief systems.

It is worth noticing that the works of Richard Paul (1994) and Connie Missimer (1989, 1995a and 1995b) on critical thinking place a strong emphasis on the need to make assessment of a form of knowledge—worldviews for Paul, arguments for Missimer—a critical contrast with alternatives to it. As I have argued elsewhere, however, they still seem to suppose that there can be something like a form of knowledge separable on its own, that can be assessed both internally and externally (Mejía, forthcoming). But importantly, it is still recognised in their work that a judgement about the validity or soundness of some form of knowledge is not complete without this contrasting action.

8.4 BASIC ELEMENTS OF THE FRAMEWORK: SUMMARY

In this chapter I have tried to develop various elements which constitute a framework or language for better understanding the problem of knowledge imposition in its relation to the problem of validity and issues of content. In this final subchapter I will summarise the main arguments, but I will also show those framework elements in a more concise way.

I started with a separation between criticality and specific forms of knowledge that might be represented either by specific claims or by specific questions. Given that both claims and questions make sense and are formulated from belief systems, and given that there cannot be any justified certainty of the epistemological kind, labelling some system or set of questions or claims *critical* would be a way of imposing the belief system they are embedded in, and of legitimising that imposition. Acknowledging then

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⁶⁹ This idea is based on Rorty's cautionary sense of the concept of truth (see Rorty, 1986).

that a critical questioning is an act that occurs from a source reading unto a target reading, it had therefore to be examined what it is that happens when a belief system is used to question another one, to see whether and how criticality can be made present and what that would mean. In doing this, the notion of *assumption* was taken as the main object of inquiry, given that it is attributed central importance in critical approaches dealing with issues of contents and validity. In a view that tried to be consistent with the philosophical approach endorsed here, assumptions made in/by a belief system were argued to be boundaries or limits to spaces of possibilities. These limits or boundaries, however, can only be drawn when other possibilities beyond those limits are envisaged—normally from another belief system. That is, and this is of crucial importance, the formulation of those limits depends on the specific [source] reading from which the [target] reading is being critically questioned.

A positive sense of criticality can then appear, which corresponds to the way in which belief systems engage in conversation and in the process limits to spaces of possibilities—or assumptions—are recognised. The word *critical*, as an adjective, could then be applied to those conversations in which this happens. But this is only an *object* mode of use of the word critical, in which a conversation is judged in those terms. An act of inquiring into a conversation in order to establish whether it is critical, is critical in itself. In this case, the word critical is being used in an *inquiry* mode. These are conversations between belief systems and not between persons (which will be discussed in the next chapter); that is, even though in most cases each belief system will be brought into conversation by a different person, this is not necessarily so. Furthermore, the critical act has to be decentered in order to prevent the imposition of every one of the belief systems entering the conversation; that is, all of them would have to play the role of both source and target reading of reality.

In what follows I will provide a system of terms that will constitute a basic language or framework, that can be used to understand issues of contents and validity, in respect of criticality and the problem of knowledge imposition. These terms, which are collected from the discussion in this and previous chapters and in many cases inspired by ideas presented by the various critical approaches seen in chapters 2 and 3, are only a starting point and should be complemented in the future by means of more research and analysis. They can be considered as a framework, in the sense in which any system of

concepts can be so regarded. However, the very rejection of the analytic-synthetic and the scheme-content distinctions suggests that there is no real difference between models and theories on the one hand, and frameworks or schemes on the other. In this sense, the following series of concepts also represents a series of commitments and endorsements that can be questioned in those terms.

The most basic concept of all here is perhaps that of a *conversation between belief systems*. It represents a process in which two different and to some extent alternative *belief systems* in a specific domain of action, are brought together for the interpretation and examination of at least one of them

Criticality, in its *object mode*, appears whenever there is a judgement about whether in a conversation between belief systems the latter are exposed in the assumptions they are making, as formulated from each other. If they are indeed exposed, such conversations are called *critical conversations*.

In its *inquiry mode*, criticality appears in the process of trying to establish whether a conversation is critical or uncritical.

A claim within a belief system is seen as belonging to a *space of possibilities*, representing a particular choice made from among them. In another belief system, other *possibilities lying beyond* that space may be envisaged. When a *rational reconstruction* of the former belief system is made from the latter, the original space will be interpreted as having certain *limits* or boundaries. The propositions stating the setting of those limits are the *assumptions* made in/by the belief system in which the original claim was made; and the space contained within those limits is its *scope*.

In a critical conversation, for the avoidance of knowledge imposition of both belief systems it is necessary that the critical act of revealing assumptions be based on rational reconstructions in both directions. When that happens it can be said that criticality has been *decentered*.

A critical conversation can be seen as consisting of four separable but interrelated processes. Two of them concern inquiry into the belief systems that are made available

as resources to those persons participating in the situation—for instance in this case the classroom situation. A process of inquiry into immediately available belief systems would serve to formulate the beliefs that represent each participant's own practices and life experience. Another process of inquiry into non-immediately available belief systems would bring forth and/or forward plausible propositions and systems of propositions known to the participants even if only in a limited and intuitive way. A process of critical engagement, is that in which the belief systems are used to formulate questions concerning each other's limits to the spaces of possibilities used. It is a critical conversation. And finally a fourth one, a process of improvement would seek to give an answer to those questions, if meaningful, or at least to formulate the belief systems in terms of "if...then" clauses. If not meaningful, it would seek to advance the conversation by explaining their meaninglessness.

9. ELEMENTS FOR A FRAMEWORK FOR STUDYING KNOWLEDGE IMPOSITION: ISSUES OF INTERACTIONS

The present chapter, just like the previous one, represents the result of the mutual irreducibility of the problems of validity and interactions. This time the discussion will be centred around the problem of interactions, and particularly about some of its aspects that are related to and allow for a better understanding of the problem of knowledge imposition. As many of the elements concerning issues of interactions are rather general and also apply to issues of contents, some of them will have already been discussed in chapter 8. For that reason, I will rely on their discussion having been sufficiently clear then, and hence in the present chapter they will only be mentioned.

In subchapter 9.1 I will develop an argument concerning the degree of dependence or independence of theories of the critical dealing with the problem of interactions, and readings of reality. The potential problem that will be examined is that of the imposition of readings of reality through the uncritical acceptance of a critical analysis of interactions. The role of this analysis is similar to that of the problems examined in chapters 6 and 7—like inescapability, givenness, and interpretation independence. I have chosen to include it in this later chapter, however, because on the one hand it is exclusively related to the problem of interactions, and on the other because it is not really directly related to the theoretical issues in philosophy of language that were presented and/or developed in those two chapters. Subchapter 9.2 examines in more detail the nature of criticality about interactions and the types of object that may properly be called critical, as well as the relation existing between knowledge

imposition and the various spaces of interactions that might be relevant for any given discussion. Subchapter 9.3 constitutes the chapter summary, and in it I will include a descriptive account of the framework elements developed throughout the chapter, that are related to the problem of interactions.

9.1 [IN]DEPENDENCE OF BELIEFS ABOUT INTERACTIONS FROM BELIEFS ABOUT REALITY

In chapter 7 I examined the issue of interpretation independence, and the conclusion was that criticality, when in terms of contents issues, is always carried out on a belief system, but from another alternative belief system. The question then was one about the possibility of the existence of independence between readings of reality and readings of readings of reality, such that criticality about contents could be neutral. Similarly, the question now is whether criticality about interactions in any situation is not also carried out from specific readings of reality; that is, whether there is independence between readings of reality and readings of interactions through which knowledge is produced. The importance of addressing this question lies in the fact that if there is no independence, then criticality might be used to legitimate the imposition of the readings of reality that the critical reading of interactions depended on. In the case of criticality about contents, what does not allow interpretation independence was found to be related to the fact that a critical analysis of a reading of reality requires an interpretation of that reading of reality, and that, moreover, a critical analysis is in itself an interpretation constituted by what are taken to be, from a certain reading of reality, related sentences (see chapter 7). In the case of current concern, the connection is not so obvious because the object of inquiry does not seem at first sight to even require to have any knowledge of what is being talked about.

The term *interactions* is directly associated with that of *persons*, in the sense that the focus here is interactions between persons. Knowledge imposition actually can take

place on a person or group of persons. But it is important to notice, however, that while inside a classroom the persons in interaction are normally relatively well-defined⁷⁰, it is not so easy to specify who is outside. That is, classroom interactions normally take place between persons that number from a few ones to a few hundred, where each one is rather easily definable *as a person*. And it is the knowledge imposition affecting *these* participants in the classroom activities, in what I have called the *immediate space of interactions*, that is the concern for the present study. Criticality, however, can also go beyond that immediate space and include those interactions between people outside of the classroom, or between them and those within.

9.1.1 Immediate Spaces of Interactions

In critical approaches many variables have been used for examining the interactions that take place in the classroom. How could one know whether those variables or their application in particular classroom contexts are dependent on readings of reality? One criterion that can be used for this purpose is that of the requirement of knowledge about the object of conversation: Does one need to have any knowledge about the object of conversation in order to be able to observe any particular variable defining interactions? If one does not, then in principle anyone, either internally or externally, could carry out a critical analysis using that variable and be neutral—not take sides—with respect to the subject being discussed and the positions about it taken by the various parties. Similarly, aspects of the space of interactions itself could be designed so as to promote a more egalitarian and symmetrical process of production of knowledge (as in Syntegration, see subchapter 3.3). There are certainly some useful variables that are formulated in this way, and among them the most obvious is whether and how much each person is allowed to talk. Similarly, the so-called *regulative talk* (see Chouliaraki, 1996; and Iedema, 1996), can in some cases be understood in this way.

There are, nevertheless, certain other variables that do demand from the person carrying

⁷⁰ If one question that one has in mind is that of who ought to actively take part in the classroom interactions—who ought to be student or teacher—then, of course, that is not defined at all.

out the critical analysis to have some knowledge of the object of conversation. In particular, this is the case whenever there are semantic questions; that is, related to meaning and to how it is transformed and manipulated in the conversational exchanges between the classroom participants. Now, according to the discussions in chapters 6 and 7 about the analytic-synthetic distinction and about interpretation independence, questions of meaning are no different from questions of truth, and the interpreters' beliefs are actively used in the production of an interpretation. Therefore, whenever one goes beyond the purely physical, syntactical, or grammatical, and steps into the realm of the semantic, the independence of the readings of interactions from readings of reality is not obtained. Now, the reach of the semantic can go further than it appears. Young, for instance, has shown that it is sometimes deceiving to identify the function of a move in a conversation only by its syntactic or grammatical form, because it sometimes actually plays a different role and is put forward with a different intention. An analysis of function, then, must go beyond that and into the intentional and the semantic, and with the latter into the processes and problems of interpretation. That was the case, for example, of Young's analysis of questions that are not really questions, and also of his proposed critical notions of recontextualisation and colonisation, which are central to his definition of genres (see Young, 1992; also subchapter 2.5). Let us think, for example, of a situation in which the critical researcher has concluded that the teacher has recontextualised some ideas expressed by a student, by means of the formulation of some different set of sentences. Whether it is actually a recontextualisation depends on whether the meaning has been changed; that is, on whether the teacher's sentences are a good translation or interpretation of the student's original ones. But this is inseparable from the question of determining what is true about whatever those sentences refer to. A rephrasing of a student's idea occurs in related sentences, but whether those related sentences actually are entailed by the original idea, or convey its meaning, is a matter of discussion and depends on the interpreter's belief system. With reference to Gore's critical approach (see subchapter 2.6), some of the categories proposed by her, and specifically those dealing with regulative talk, may not involve issues of meaning. However, others like those about normalisation of meaning fall within this category. If that is so, and given that interpretation independence is not possible, then the use of a theory of the critical for analysing the interactions taking place in a particular space would be loaded to some extent with the particular readings of reality held by the critical person. This means that, for instance, Young's ideal of finding "a basis for critique that is both content-free (...) and internal to language" (1992, p.72) may only be possible in a very narrow and limited way, because broader-scope applications of that critique in particular situations may involve the content represented in the critical interpreter's readings of reality.

Just like in the case of theories of the critical dealing with contents, here too the dependence on the interpreter's readings of reality should perhaps be qualified as possibly being of a weaker or of a stronger nature. That is, while sometimes beliefs directly used in the interpretation might be incompatible with beliefs held by one or some of the participants in the conversation, in some other cases they may comprise only non-controversial ideas about whatever it is that the sentences being interpreted refer to. Importantly, however, how controversial a belief is depends only on the existence of other persons who might dispute it, and as such it depends on the specific situation being examined and the persons involved in it.

9.1.2 Non-Immediate Spaces of Interactions

When it is non-immediate spaces of interactions that are considered, the issue under critical scrutiny becomes that of how forms of knowledge or belief systems from the outside have been produced through fair or unfair processes of conversational interactions between persons or groups.

To a certain extent, a critical analysis here would be similar to those analyses of conversational interactions taking place within the classroom. One difference would lie in the fact that the object of critical inquiry is the external processes by which some belief systems have been produced, and specifically those that are to be engaged with in conversation [between belief systems] inside the classroom. Another would be that the concern when it comes to non-immediate spaces of interactions is not necessarily knowledge imposition, but may involve other issues related to validity—like who has not been allowed to talk, and not necessarily to think for her/himself. This similarity might then lead one to think that just like in the case of the immediate space of

interactions, some variables—even if only a limited number of them—could be used independently from the readings of reality endorsed by the person carrying out the critical analysis. This way, then, criticality might work in at least two ways: Firstly, in relation to the production of forms of knowledge from external sources, one would be able to point at various persons or groups that have not been properly engaged with in conversation, and with that also to determine partiality in those forms of knowledge. For instance, this would be the case when messages from the media, politicians, dominant groups in society, etc., are the object of inquiry for the classroom activities. And secondly, in relation to the production of knowledge by the participants in the classroom activities, one might be able to point at persons or groups from the outside who have not been given a voice—whose views have not been taken into account, whatever those views are. It is very important here not to confuse this second form of criticality about interactions with a form of criticality about contents: The difference lies in the fact that whereas the former asks questions about what persons or groups have not properly been taken into account as possible sources of alternative belief systems—without necessarily knowing what those belief systems are—the latter asks questions about what specific belief systems have not been properly taken into account—without necessarily knowing whether or which other persons or groups hold them

Relevance and Categories of Persons

The similarity between the immediate and the non-immediate spaces of interactions is not, however, as prominent as it may first appear. In the immediate space of interactions the participants are relatively well-defined, and this facilitates not only the focus of the study of knowledge imposition upon them, but also the determination of the persons who should be engaged with in conversation—because they are the participants themselves. In non-immediate spaces of interactions there are difficulties that hinder this determination of *persons* in a neat way. I will consider two such difficulties: The first one refers to the unbounded nature of the range of possible interlocutors that could be engaged with in conversation. On the one hand the number of human beings is virtually infinite, given that it does not have to be only living persons who should be included in the analysis (see for instance Ulrich's comments on the inclusion of the

future generations, 2000b). On the other hand it is not at all clear that it has to be only human beings who are to be included, because the consideration of other sentient beings might be important, even if only in a speculative way in the consideration of what their interests might be (see for instance Midgley, 1995 and 2000)⁷¹.

This problem, as can be seen in the reviews of some of the critical approaches, tends to be solved by recourse to the use of categories more specific than that of persons; instead, it is *groups* of people or other beings, as defined by one or more variables sometimes given by the theory of the critical itself. Some instances of such categories as used by critical approaches are oppressed, women, Western, whites, peasants, homosexuals, not-yet-born, and nature. In one sense it can be and has been said that these categorisations reduce the variety of the multiplicity of human beings, by highlighting one or a few aspects or variables, and ignoring the rest. But, and in accordance with the discussion in chapter 6 about the scheme-content distinction, categorisations do not come arbitrarily on their own; instead they are part of wider They are not undiscussable elements of organising theoretical belief systems. frameworks, but active and changeable parts of belief systems or readings of reality. The question about the possibility of a non-imposing form of criticality about interactions in non-immediate spaces then includes that about whether the beliefs involved in the production of those categorisations are or can be independent from readings of reality that would oppose or be alternative to those being critiqued.

The relation between the readings of reality which are the object of critique and the beliefs from which critique and the categories of analysis are produced can be examined through the notion of *relevance*. A person carrying out a critical analysis of interactions will name a particular category of a group of persons within that analysis if in her/his view it is a way of describing persons that is relevant for the particular beliefs whose production is being discussed, or at least for the domain of reality those beliefs are about. One particular instance of the way relevance appears here comes in the idea of *interest*. A particular categorisation of persons might be thought relevant if interests shared by all those included in the category are affected by the readings of reality being critiqued. For instance, if peasants have interests which are related to whatever the

⁷¹ In this document I will be using the word *persons* instead of the more inclusive one of *sentient beings*, reflecting that in most cases the issues of interactions will involve human beings only.

belief systems being critiqued are about, then the category *peasant* would be worth taking into account in a critical analysis of interactions, to determine whether peasants have been properly given a voice in the production of knowledge. But *interest* is not the only notion that can be used here: For example the idea that there might be different epistemologies depending on one's history, or perhaps social positioning, also suggests a relation of relevance. In fact, in more general terms it is the envisaged possibility that persons in a group or category *might have something else to say*, which gives relevance to the naming of that group or category in the critical analysis⁷². And having something else to say simply means that their views might provide reasons to support, refute, complement, or modify the belief systems already present in the conversation.

Importantly, relevance as related to the possibility of having something else to say is not something that can be determined outside the belief systems involved—the ones already brought in by the participants in the conversation and the ones held by those in the external group in question. To show why this is so, let me first start with the idea that to claim of a particular belief that it constitutes a relevant reason for an argument or conversation, is to simultaneously make claims about whatever that belief is about. Now, when someone suggests a category of persons as relevant for a critical analysis of interactions, it is because s/he already has an idea—even if only a very rough and vague one—of how their views might be relevant. And in order for this to be possible s/he must have an idea of what their views are, for otherwise s/he would not know that they might be relevant and the categorisation would be as meaningless as any other one. In conclusion, the postulation of any specific category of persons in a critical analysis of interactions is made from, and is part of, a belief system in which it is seen as relevant. Therefore, there cannot be total independence between the categories and the belief systems which are brought into the conversation.

The argument above is important to understand issues like some of the criticisms made by feminists and others at Paulo Freire's proposal, on the grounds that it was patriarchal and ignored women's different experiences and ways of knowing (see subchapter 2.2). Seen as dealing with the problem of interactions in non-immediate spaces, Freire's

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⁷² Again, in trying to be consistent with the rejection of the scheme-content distinction, I am restricting my claim to the rather simple idea of "having something else to say", without the need to postulate more complex but also more problematic ideas like that of an *epistemology*.

theorisation on subjects and objects in the world and on how the structure of society prevents some people from having an active voice in the understanding and construction of reality—the reading and the writing of the world—provides an analysis of [oppressive] interactions at a societal level directly related with the production of knowledge. But this analysis of interactions is very closely related to his own ideas about the object of inquiry in the classroom; that is, the existential themes about the students' lives. In this case this characteristic that consists in the fact that the object of inquiry itself was in part the very structure of interactions at the societal level, makes the connection between the two fairly obvious. What it is leaving out, however, makes the analysis more interesting: Its lack of recognition of women's and/or gender issues in the students' lives (as noted by, for instance, Brady, 1994) is a reflection of and is reflected on its lack of recognition of gender as a relevant variable, and of women and men as relevant categories, in the critical analysis of interactions. But this is not to say that Freire had an obvious blind spot which he should have seen: The variable *gender* only appears relevant when one has an idea of how women's views might be different from men's, about whatever is the object of inquiry. And this is something feminists have helped the rest of us see in many situations in which it simply had not occurred to us before, that gender could be a relevant variable. This still does not imply that it is relevant in every situation, though.

From Categories of Persons to Belief Systems

In the previous section I argued that categories of persons are not independent from belief systems in which they are regarded as relevant for some given situation. In this sense, any given categories are deemed relevant within a belief system. Nevertheless, this dependence relationship can also in some cases be looked at from the opposite side; that is, one can also start a critical analysis with some specific *groups of persons* in mind, as opposed to starting it with *belief systems* which determine which of those are thought to be relevant. For instance, authors in the critical pedagogy movement mention a number of category-related variables such as race, gender, class, and sexual orientation, which they seem to postulate should be examined in any critical analysis. This way, during critique one might reflect on whether persons from these groups—persons in these categories—might have something special to say about the object of

inquiry, and whether their voices have traditionally been excluded from knowledgeproducing conversations.

In this case, to ask these questions the person carrying out the critical analysis would have to have previous experience suggesting that those categories have been relevant in other situations for analysing interactions. Or it might be someone else who suggests to her/him the categories as potentially relevant, and s/he uses them tentatively to explore the possibility of their relevance. This latter case, for example, seems to be what Midgley does when he uses the technique of *unfolding* (see Midgley, 2000), which consists in the generation of a list of stakeholders in a given situation by means of asking the ones already in the list about other possible stakeholders that they can think of. This way the list grows as new categories are added to it, and persons from the new groups are then asked the same question, if possible. Given Midgley's practical interest, his emphasis is put on stakeholders. However, the more general category, and the more important one for the educational context discussed in this study, seems to be the one mentioned above "persons who might have something to say". There might be persons who do not directly have a stake in the production of some knowledge, but whose views might be relevant for whatever discussion or inquiry is being carried out.

9.2 Criticality About Interactions

The work done in the various critical approaches reviewed in chapters 2 and 3 dealing with the problem of interactions, and particularly the categories of critical analysis that they provide, can be taken as a good starting point for critical reflection and/or design of interactions. Because these approaches are, in my view, meaningful developments which are well oriented, I will not advance the argument in that same direction. Instead, I will discuss some consequences of accepting the conclusions reached in chapters 6 and 7, and in subchapter 9.1, in relation to criticality about interactions. The discussion here should then be understood as lying within the limits of the possibilities of dealing with the issue of interactions on its own.

Just like in the previous chapter the question of where criticality is located emerged out of the impossibility of separating [critical] readings of readings from readings of reality, here a similar question will also appear. If, as argued in subchapter 9.1, only certain limited aspects of interactions can be determined independently of the readings of reality endorsed by the person carrying out the critical analysis, and more generally readings of interactions depend on readings of reality, then it seems that criticality should not be ascribed to specific readings of interactions. That result does not necessarily imply, however, that criticality about interactions cannot be obtained, or that its quest should be abandoned. The question of what kinds of interactions might be producing or at least promoting the imposition of knowledge—of some knowledge endorsed and/or put forward by some specific person or group—is still an important one to ask, even if the answers one may give are ideological in some sense. There is, therefore, a need to examine the nature of criticality in relation to the problem of interactions.

9.2.1 The *Object* and *Inquiry* Modes of Criticality About Interactions

To carry out the analysis mentioned above, I will first distinguish two different senses of criticality about interactions. In chapter 8 I already presented the distinction between an *object* and an *inquiry* modes or senses of criticality in relation to contents and belief systems. The *object* sense corresponded to the idea that conversations between belief systems may be critical or not—or more or less critical—depending on whether the scopes of each of the participating belief systems are mutually enhanced by means of the disclosure of assumptions, and on whether rational reconstructions are made in both directions. The *inquiry* sense referred to the idea that an act of inquiry or reflection on whether some particular conversation between belief systems is a critical conversation, is critical in itself.

In the case of the issues discussed in the present chapter, two analogue modes of criticality, this time about interactions, can also be found. The first one is also an *object*

sense, and it follows the way in which the idea of criticality is conceived in approaches like the dialectical and the pragma-dialectical (see subchapter 2.1) and their notion of a critical discussion. As explained then, however, a critical discussion involves both aspects of contents and of interactions, although it tends to emphasise more the latter because of its rhetorical orientation. Despite the fact that it is also a kind of conversation—like conversations between belief systems, but this time between persons—I will keep the expression discussions to acknowledge the pragmadialecticians' use of the term, and to distinguish the latter type of conversation from the former. Now, the work in various approaches like the pragma-dialectical itself, and the Habermasian one by Young, has advanced quite a lot in the direction of the specification of the elements that characterise a critical discussion, and I will not pursue that kind of argument here. The second sense of criticality is related with the act of inquiring and making judgements about whether particular discussions are critical or not. This second sense is more similar to that proposed by critical pedagogy theorists in their insistence that students should be critical about the processes by which public knowledge is produced, but also to that implicitly suggested by Young's critical Habermasian analysis of classroom interactions.

In general terms, it can be said that it might be desirable to have a pedagogy of critical discussions most of the time, and the classroom activities could be designed with this goal in mind. The examination of whether the classroom discussions are effectively critical is also a critical activity in itself, as well as the analysis of discussions or other knowledge-producing interactions outside of the classroom. Nevertheless, and as I will try to explain now, it is not so much the result of the examination, but the examination itself which can be considered critical.

9.2.2 Critical Discussions and Critical Conversations

The very expression *critical discussion* suggests that it is not enough to have a discussion for it to be one in which all the participants are allowed to genuinely construct their knowledge and to contribute to the others' construction of their own.

Discussions will not always allow the various persons involved to voice their views, concerns, doubts, and questions, in a symmetrical manner, and not be manipulated. Critical discussions are, then, restricted in some ways that would attempt to guarantee that symmetry; and as such, they can be regarded as an ideal in the same sense that Habermas' Ideal Speech Situation (ISS) is so understood (see subchapter 2.4). Now, regardless of how one is willing to answer the question of whether such ideal can be attained in practice, there is another reason why readings of interactions—beliefs about whether and how much a discussion is critical—should not be considered definitive. That is what I intend to explain in what follows.

When one is describing a discussion as critical—or more or less critical—one is making use of the first sense of criticality about interactions, as explained at the beginning of this subchapter. The conclusions of an inquiry or a reflection about whether a particular discussion is critical would be related to the second sense of criticality about interactions. The argument in subchapter 9.1, however, suggested that someone's beliefs about interactions may depend in many interesting cases on her/his beliefs about the part of reality which is the object of inquiry. If that conclusion is granted, then the knowledge resulting from a critical analysis of interactions should not be called critical. The reason should be obvious by now: Given that that knowledge depends on the particular readings of reality held or endorsed by the critical interpreter doing the analysis, calling that knowledge *critical* would be a way of legitimising those readings of reality—and possibly their imposition—in the name of criticality.

Another better possibility consists in taking as critical [in the second sense] the act of inquiring into or reflecting on any given interactions in which knowledge is produced. Given that the reading of interactions produced as a result of that act of inquiry is acknowledged to depend on a reading of reality, it is the one-way engagement of a reading of reality and some interactions that could be properly called critical. That one-way engagement is simply an act of inquiry, and it is the form proposed here for the second sense of criticality mentioned above. Importantly, due to the fact that there are various belief systems or readings of reality in conversation, critical analyses of interactions should not be produced from only one of them, and they should be incorporated into conversations between belief systems. In other words, there should be one dimension of the conversations between belief systems, related to the inquiry into

interactions in the immediate space as well as in non-immediate ones. Now, conversations between belief systems about spaces of interactions would nevertheless be different from those in which the object of conversation is some other part of reality, in at least one important aspect: It is recognised that it is only possible to correct an existing problem in the knowledge-producing interactions, by means of the involvement of those persons or groups recognised as affected by the problem—e.g., those whose views have been distorted or manipulated, or whose opinions have not been voiced. That would effectively bring about an expansion of the discussion scope, in terms of the *inclusiveness* of the interactions⁷³.

9.2.3 Knowledge Imposition and Spaces of Interactions

Possibilities of Detection and Prevention of Knowledge Imposition

Criticality about interactions will play different roles in relation to the prevention or promotion of knowledge imposition depending on whether the space of interactions in focus is the immediate one or a non-immediate one. The distinction between immediate and non-immediate spaces also corresponds to a very important distinction between roles in criticality about interactions. The problem of knowledge imposition is taken here as a concern directly related to those people who are involved and participate in the classroom interactions—normally the students, but perhaps also the teacher and other possible participants. That is, the preoccupation is that knowledge will be imposed on them. People not belonging to the group of classroom participants, although themselves possibly the subjects of knowledge imposition in processes and interactions outside of the classroom, are not the direct target for preventing that from happening. If critical discussions are held within the classroom—i.e. if a pedagogy of critical discussions is used—then the kinds of knowledge imposition that could be detected by means of an analysis of the immediate space of interactions would be prevented.

⁷³ Notice the similarity between the notions of *inclusiveness*, as related to interactions, and *scope*, as related to contents. Furthermore, both are dependent on belief systems from which they are formulated.

In the case of analyses of interactions in non-immediate spaces, the prevention of knowledge imposition works just in the same way it does in the case of inquiry into contents: The validity of forms of knowledge coming from the outside can be questioned by means of questioning the lack of inclusiveness—by claiming that certain discussions were not held critically, or at all—of the processes in which they were produced. In this latter case, it has to be clarified that a failure to properly include some person or group in a discussion does not in itself necessarily constitute a reason against the form of knowledge produced in that discussion. Rather, what is being said is that those persons or groups excluded could have had something to say which might have been relevant for that form of knowledge: for supporting, modifying, refuting, or complementing it—even if one does not know what that contribution might be in a precise way.

Determination of the Various Relevant Spaces of Interactions

Now, which spaces of interactions seem to be relevant for carrying out critical analyses in the *inquiry* mode? Given that spaces of interactions are spaces where knowledge is produced, the question of which spaces of interactions are relevant is given by the forms of knowledge which are relevant or which are involved in any one given conversation. In chapter 8 I argued that there are various different belief systems—which are forms of knowledge—that should ideally enter a critical conversation: those immediately available to the participants in the discussion, and those non-immediately available. Apart from them, during the conversation itself the belief systems held or endorsed by the participants will be complemented, abandoned, modified, or improved in some way. Therefore, this conversation is another space in which knowledge is produced. And actually it is the immediate space of interactions.

An inquiry into immediately available belief systems would be a critical inquiry into the processes—in terms of interactions—by which the various participants came to hold the belief systems that they hold at the moment of entering the conversation. It would be a "critical ontology of ourselves" (see for instance Fuenmayor, 1997), or more appropriately of the participants in terms of the belief systems held by them which are

relevant for the conversation. However, consistently with the argument in subchapter 9.1, the result of that analysis will not be called critical here. Now, given that this form of criticality is oriented towards the participants' own belief systems, the relevant spaces of interactions will be part of their own lives. Such critical analyses would then belong to a kind of self-reflection.

When critical analyses are made of spaces of interactions in which non-immediately available belief systems are produced, the inquiry turns towards messages coming from other external sources, which may well be the object of conversation at any given time. For instance, the critique proposed by authors in critical pedagogy is usually made on messages and forms of knowledge from outside sources, like politicians' speeches, TV commercials, and so on. As part of this the critique on the situatedness or locatedness of those forms of knowledge—insofar as it deals with aspects of the social position they are coming from and hence of which other social positions were not present in their production—is a critical analysis of interactions of non-immediately available belief systems.

Criticality About Interactions From and About Belief Systems

The discussion in the previous section (9.2.3) shows one side of the relation between belief systems and critical analyses of interactions. According to it, the spaces of interactions associated with the production of the various belief systems involved in the conversations in the classroom—either entering it, or being produced as a result of the conversations—are relevant for the critical inquiry into interactions, and for knowledge imposition. Previously in section 9.2.2, I had also suggested that any critical analyses of interactions should be carried out from the various available belief systems, in conversation, due to the fact that the former are not independent from the latter. This establishes a double link in which criticality about interactions is effected *on* the belief systems in conversation—or more exactly on the processes by which those belief systems were produced—but is also carried out *from* them.

9.3 BASIC ELEMENTS OF THE FRAMEWORK: SUMMARY

In this chapter I have discussed some issues related to criticality about interactions, trying to clarify its nature and possibilities. In this final subchapter I will first summarise the main arguments in the chapter, to then provide a description of basic elements of a framework for better understanding the problem of interactions in relation to the problem of knowledge imposition. The framework elements mainly correspond to some concepts and ideas developed in this chapter, but I will also bring forward some from some of the approaches reviewed in chapters 2 and 3. The first thing to say is that addressing only the problem of interactions is not enough for identifying and/or preventing some kinds of knowledge imposition, and therefore it necessarily has to be complemented by simultaneously addressing issues of contents—as suggested in chapter 8. For the sake of clarity, the term *discussion* was used to refer to conversations between persons, and so they should be distinguished from conversations between belief systems.

The chapter started with the question of whether an analysis of interactions could be totally neutral with respect to particular readings of reality. The argument was slightly different for immediate and non-immediate spaces of interactions. In the case of the former sort of spaces, it was argued that as long as the elements of the analysis remained within the domains of the syntactic, the grammatical, or within other formal domains, neutrality could be obtained. However, it can be seen in the work of various authors who deal with the problem of interactions, that non-semantic aspects cannot detect important forms of knowledge imposition. That is due to the fact that some interactions are defined in terms of how meanings are used and transformed by them, and this then involves the problem of interpretation. As argued in chapter 7, the beliefs held by the interpreter are actively used by her/him in the production of an interpretation, and therefore the latter may vary depending on them. The same kind of analysis may as well apply in non-immediate spaces of interactions. However, in this latter case there is a further consideration: Interactions are specified as relations or acts between persons, but on the one hand persons are not so clearly defined in non-

immediate spaces—it is not always straight-forward who is a potential candidate for participant in the discussion, including not-living persons or other sentient beings—and on the other hand the number of persons is simply enormous. Some categories of persons have to be defined, then, for the analysis to be not only manageable but possible in principle.

Because of this dependence, it was concluded that analyses of interactions have to be incorporated into the conversations between belief systems; that is, they should be produced from the various belief systems involved in the conversational processes taking place in the classroom. Similarly, in the opposite direction it was also suggested that critical analyses should be produced of the interactions in which all the involved belief systems are or were produced, given that these are the spaces of interactions relevant to the conversation.

In the following paragraphs I will integrate in a more concise and coherent way the various elements that constitute a basic framework for understanding issues of interactions in relation to the problem of knowledge imposition.

The central concept is that of a conversation between persons, or a *discussion*. In it, different *persons* interact with each other in order to produce knowledge both individually and collectively. The degree to which various persons can participate in an appropriate way in the discussion is its *inclusiveness*.

Just like in the case of criticality about contents, here too two senses or modes of criticality were deemed relevant. The first one, the *object mode*, is one in which a discussion is judged more or less critical depending on whether the interactions between the persons involved are symmetrical and properly allow for all the participants to develop their own knowledge and contribute to the others' development of theirs. When that occurs, the discussion is called a *critical discussion*.

The other sense of criticality is the *inquiry mode*. It corresponds to the act of inquiring into how critical a particular discussion is. In the inquiry mode, criticality appears in *the act of reflection or analysis*, rather than in the result of that analysis, which, as argued above, depends on the particular readings of reality held by the person carrying

it out.

Different spaces of interactions were found to be relevant in a discussion, in relation to the conversations between belief systems associated with it. In respect of the belief systems that are being produced or modified in the course of the conversation, an analysis of the immediate space of interactions represents a critical inquiry into the classroom discussions themselves. As concerns the immediately available belief systems entering the conversation, an analysis of the space of interactions in which they were produced corresponds to a critical inquiry into the participants' relevant histories With reference to the non-immediately available belief systems being brought into the conversation, the analysis would now be a critical inquiry into the production of relevant external forms of knowledge. Any problem of noninclusiveness found in the process of critical inquiry with respect to any person or group of persons can in principle be fixed by allowing the ones affected to participate. That participation, which is a process of engagement, may take different forms depending on the possibilities of actually interacting with the affected, and might range from their actual proper personal participation in the discussion, to a constructed participation by means of the use of their spoken or written ideas without their actual engagement. Only the former possibility is valid, however, if the space of interactions in focus is the immediate one and the affected are actual participants in the classroom discussions—normally students. This is a *process of improvement*, and it consists in an enhancement of the inclusiveness of the discussion.

Each of the abovementioned critical analyses of interactions should ideally constitute a dimension of the conversations between belief systems. This establishes a double link in which criticality about interactions is produced *on* and *from* belief systems.

PART V

10. CONCLUDING REMARKS AND POSSIBILITIES FOR FURTHER DEVELOPMENT

It is time now to bring to a conclusion the study which constitutes this document. As said in the introduction, it was largely about the problems of autonomy of thinking and knowledge imposition, and their relation with criticality in educational contexts. I will not present now a complete summary of the arguments and discussions, because that has been the task of the final subchapter of each chapter⁷⁴. I will nevertheless pay special attention to those conclusions that correspond in a very direct way to the questions formulated in subchapter 1.4 in the introduction to this document. That is subchapter 10.1. However, this final chapter will be mostly devoted to commenting on the significance of the main conclusions and results of the study, and on the possibilities for future lines of inquiry derived from here. That is the purpose of subchapters 10.2, for significance, and 10.3, for possibilities of further inquiry. And finally, subchapter 10.4 contains a concluding comment on the study.

⁷⁴ A reader interested in a summary can read only the final subchapter of each chapter. S/he will find there a self-contained argument that summarises the whole document.

10.1 How This Study Has Answered the Main Questions Formulated

In subchapter 1.4 I formulated a set of five questions that this study sought to answer. Those questions are the following:

- 1. What critical approaches are there, in pedagogy, in relation to the problem of knowledge imposition and the development of autonomy of thinking? By means of what mechanisms do theories of the critical used by those critical approaches seek to prevent knowledge imposition?
- 2. How is the *system* idea used as a critical device in relation to knowledge imposition and autonomy of thinking? By means of what mechanisms do theories of the critical used by systems approaches seek to prevent knowledge imposition?
- 3. How, or under what conditions, can [or cannot] those forms of criticality, systemic and otherwise, prevent the imposition of knowledge and promote the development of autonomy of thinking in students?
- 4. What relation is there between the critical knowledge produced by the use of those theories of the critical, and the forms of first-level knowledge they were used on? For instance, what first-level knowledge, if any, is needed in order to produce critical knowledge?; or how does the justification of any critical knowledge produced depend on that of some form of first-level knowledge?
- 5. How can one describe the pedagogical activities in the classroom, in a systemic manner, so that a better understanding is obtained of the ways in which knowledge imposition is being prevented or allowed/ promoted? That is, what variables of analysis are relevant for understanding what goes on in a classroom in relation to autonomy of thinking and knowledge imposition?

The first question is mainly answered in the first chapter of part I (chapter 2), in terms of a description of a number of critical approaches in education, and a brief explanation of how each of them deals with the problem of knowledge imposition. *Grosso modo*, the Critical Thinking Movement gives logical and rhetorical tools to students with

which they can question forms of knowledge and therefore not accept them uncritically. Freire and other authors in radical pedagogy also do this by means of the teaching of sociological tools for questioning forms of knowledge; but they further attempt to organise interactions in the classroom in a symmetrical way such that no voices are allowed to dominate and be imposed over others. Post-radical pedagogies do something very similar, but this time without recourse to any form of positive criteria that can guide judgements of validity of forms of knowledge. In terms of classroom interactions, some of them have further sought to create pedagogies which do not have an existence outside of the very moment in which they are *performed*, as a means to prevent any repressive elements that come with the very act of planning according to positive standards or criteria. Robert Young's Habermasian approach and Jennifer Gore's Foucauldian one carefully and systematically analyse classroom interactions in a variety of contexts, to see if and how knowledge imposition takes place.

The second question, in a very similar way to the first one, is mainly answered in chapter 3. Boundary critique also constitutes a tool that can be used by people (e.g., students) in order to be critical when being presented with forms of knowledge, and hence to not allow them to be imposed. Interpretive Systemology similarly provides a way of questioning the [lack of] validity of forms of knowledge and of disclosing alternatives. Total Systems Intervention and critical pluralism do something similar, but this time they further provide analyses of the very alternative forms of knowledge that users are to be critical about. Finally, Team Syntegrity provides a way of organising interactions in knowledge-construction processes such that they are constructive and democratic. A democratic kind of process would be a guarantee that certain forms of knowledge imposition do not take place.

However, it is actually only in chapters 4 and 5 that the mechanisms by means of which all these approaches seek to tackle knowledge imposition are examined and explained in detail. In order to do this and to respond to question 3, a new categorisation was produced, which takes account of two different strategies, namely via the *problem of validity* and via the *problem of pedagogy*. Approaches dealing with the problem of validity can also take different forms: Their theories of the critical can be content-full—if they entail source readings of reality—or content-empty; and content-full theories can either advocate one or more of the source readings of reality, or simply present them.

The categories used here are simply different from the ones that are normally invoked to explain the various approaches, as perhaps presented more clearly in chapters 2 and 3. Can one say that my categories are somewhat imposed from the outside, whereas the ones usually found in other texts actually show their essence? Quine's discussion on the analytic-synthetic distinction, and my own discussion concerning interpretation in chapter 7, should make us suspicious of the very idea that linguistic objects—like theories and approaches—have essences.

Now, the conditions under which they can effectively and exhaustively prevent knowledge imposition (the answer to question 3) were specified in terms of requirements. All approaches using the strategy of tackling the problem of validity were argued to require *interpretation independence*; those with content-full theories of the critical were argued to require *inescapability*; and those with content-empty theories of the critical or tackling the problem of pedagogy were found to require *givenness*. And, given that in chapters 6 and 7 these requirements were argued to be impossible to be met, it was concluded that a totally exhaustive and effective prevention of imposition was not feasible (at least using approaches of this kind).

Question 4 is responded mainly in chapter 7 in the discussion of interpretation, and complemented in chapter 9. The conclusion can be briefly stated in the following line of argument: Critical knowledge of a target reading of reality is a form of interpretation of it. Interpretation depends on the interpreter's beliefs about the same knowledge domain that the target reading refers to. The critical knowledge produced therefore depends on the critical person's—the interpreter's—beliefs and hence it simply cannot be neutral in relation to target readings. A corollary consists in the fact that [parts of] belief systems can be imposed through the imposition of interpretations made *from* them. Now, when the object of study is not a target reading but the interactions of a process of knowledge construction, as when the problem of pedagogy is at stake, critical knowledge about those interactions will also depend on the critical person's belief system if some kind of interpretation of contents is needed in order to describe types of interaction. This implies that only in a very limited way this critical knowledge can be neutral in respect of processes of knowledge construction.

Finally, the response to question 5 consists in the framework, presented here in two

parts, at the end of both chapters 8 and 9. The framework is based on a deeply holistic way of understanding language, and thus the acts of knowing and interpretation. In that sense, if for no other reason, I take it to be systemic. But, contrary to *boundary critique* and as I will explain better in a later section of this chapter, it does not take the system boundary as the central element of critique.

Now, interestingly, the framework does not try by any means to completely replace the work done by the proponents of the existing critical approaches; they all seem to have things to contribute to the problem of knowledge imposition, and therefore can still be used. Instead, I see the present work as setting limits to the claims that can appropriately be made by each of them in relation to this topic, and warning about the possibility to overlook certain forms of imposition that can occur, or even be promoted in the name of critique. Along this line, the framework helps one reflect on the various possibilities of prevention and risks of knowledge imposition in a conversational process of knowledge construction. But the original ideas and concerns about the various different possibilities of the existence of knowledge imposition and its prevention do not come in an original way from the present study. They come, instead, directly from the critical approaches by means of which different authors were using criticality to help prevent knowledge imposition and develop intellectual autonomy, as well as from the criticisms made at them. The framework's conceptual categories try to account, in a coherent manner, for those concerns: Asking questions about those elements (e.g. about non-immediately available belief systems; or about the level of criticality of the classroom discussions) should guarantee that one will take seriously those concerns presented by the proponents of the critical approaches and their critics (e.g. the critical pedagogues' concern that if one does not explicitly address certain contents—represented in some non-immediately available belief system like for instance a Neo-Marxist one, or a feminist one—then the imposition of some forms of knowledge will not be prevented; or Young's and Freire's concern that a non-discursive pedagogy will lend itself to some kind of manipulation), but with some necessary and cautionary measures (e.g. that those non-immediately available belief systems brought into conversation be engaged in a genuinely critical conversation, that is decentered; or that only *interpretation-free* elements can unproblematically be used for this purpose, and that interpretation-full elements should be examined from various belief systems).

This way, and in terms of *critical conversations*, approaches dealing with the problem of validity can all be seen as contributing in the process of inquiry into non-immediately available belief systems. In particular, those using content-full theories of the critical provide directly themselves relevant belief systems which should enter the conversation, by means of the source readings of reality that they entail. Those with content-empty theories of the critical can also help prompt the search for those belief systems, by means of questions that should make the participants in conversation reflect on possible alternatives to the ones most immediately available to them. But they can also in some cases help in the process of critical engagement, given that some of them—such as the pragma-dialectics—theorise elements that can be useful to understand how two or more belief systems can interact. My own work on assumptions and spaces of possibility (see subchapter 8.2) can also be seen as a step in that direction.

Similarly, this time in terms of *critical discussions*, approaches dealing with the problem of pedagogy can help make sure that classroom discussions are critical. However, they can also be used to further inquire into the processes that gave rise to the production of the forms of knowledge that enter the conversation. But in this latter case, all approaches whose theories of the critical take as their object of inquiry interactions between persons at any level—personal, societal, etc.—can contribute.

In all cases any critical inquiry of the kinds just mentioned should be made from the various belief systems available. Otherwise, and as a consequence of the impossibility to obtain interpretation independence, imposition can occur in the name of critique. The question of where any critical analysis is made from is a non-trivial one.

10.2 SIGNIFICANCE

I am going to refer now to the implications of accepting the results of this study, for the three domains of knowledge that, as explained in the introduction to this document, I have brought into an encounter: criticality, systems thinking, and pedagogy. Some of these implications will be more significant than others, but I hope to show that all of

them come in an original way from the analysis that constitutes the whole study.

10.2.1 For Criticality

Having from the start made a distinction between critical knowledge—the knowledge produced when one reflects critically on some readings of reality—and the reading of reality one is critical about, the main conclusion that I have reached consists in the fact that those two forms of knowledge are not independent insofar as the former requires having produced an interpretation of the latter; or, more specifically, that the construction of critical knowledge depends on the reading of reality one holds. Actually, this conclusion is extended to readings of reality in general, and the main component of the argument lies in the interpreter's active use of her/his beliefs in the production of an interpretation. That is, it is because interpretation depends on the interpreter's beliefs about reality that critical knowledge should not be regarded as being different in kind from the knowledge represented by readings of reality. Now, as mentioned in section 1.2.1, the distinction is one that I claim is implicit in the idea of critique and in the advice that one should be critical about forms of knowledge. But I am saying now that it is just in a narrow sense that it can be said that critical knowledge and first-level knowledge are really separate. This way, for instance, someone's belief that a particular investment proposal is the best one may be considered first-level knowledge—because it would be a belief about investment proposals, and about what is good—whereas the belief that the validity of that belief is limited in that it does not take ethical aspects into account may be considered critical knowledge—because it is a belief about the validity of beliefs, their limitations, and so on. But, as Sellars showed us (see chapter 6), having any belief implies at least having other beliefs about why that one is justified. This does not mean, however, that the distinction between first-level and critical knowledge is a confused one; rather, I would say that it is confusing if one is not careful enough and does not have in mind that they are not really independent. But this is just another way of putting the answer to question 4 from subchapter 1.4, which I have already commented on. To repeat, I would not say that the distinction was useful at some point, and then it stopped being so. Instead, I would say that the

distinction can still be made in the simple sense that I have already explained, but that one needs to be cautious so that it does not become misleading. Specifically, I should mention the following cautions: First, first and second level forms of knowledge are not of different epistemological kinds. Second, and this is derived from the first caution, their justification proceeds in the same way—with reasons—and can be problematic just in the same way. The results of critique—readings of readings of reality—are as problematic as readings of reality. And third, given that any belief entails many other beliefs, including some that may lie on that second level, critical knowledge is not an exclusive property of critical persons. It is *always* necessarily present in more or less sophisticated ways in any first-level form of knowledge. This is the inseparability characteristic that is a direct consequence of interpretation independence.

Now, given that the analysis was made *from* the Rortian and Davidsonian philosophy of language, this conclusion may be perhaps hardly surprising. For instance, Spaul has remarked that Rorty rejects any need for second-order forms of knowledge: "Rorty is post-modern to the extent that he believes that first-order narratives and dialogues between them are all one needs, or can have, in the pursuit of knowledge" (Spaul, 1993, p.151). I have to grant that. Rorty has sometimes argued against a view of knowledge that depicts it as having some foundations, even if these are arbitrary and there are plausible alternative ones. It can be said that I have translated that as the idea that for him neither philosophy nor any other discipline should be regarded as *foundational*—in the sense of providing the foundations that knowledge needs so that it can be epistemologically certain—or as *critical*—in the sense of disclosing the [non-necessary, arbitrary, temporary, etc.] foundations of particular forms of knowledge⁷⁵. Davidson's rejection of the scheme-content distinction also takes us in the direction of not accepting the foundationalist role that schemes would play, again, even if they are somehow arbitrary. However, my analysis is original at least in that the conclusion needed to be spelled out, and in that those suggestions by Rorty and Davidson did not examine in detail the nature of the knowledge produced by means of the application of some theory of the critical.

But then, if there is no such thing as a kind of knowledge that might properly be called critical, what can be critical? I have already started to briefly discuss this question in chapters 8 and 9. There, I also postulated two modes of criticality which can be about both issues of contents and issues of interactions. These two modes were labelled object and inquiry. Are there, then, critical or uncritical conversations or discussions in the *object* mode—and critical or uncritical processes of questioning conversations and discussions—in the *inquiry* mode—? I have already suggested that this would be an inappropriate conclusion, given that the judgement of critical or uncritical in both cases depends on, or is tainted with, the beliefs of the person who utters the judgement. Nevertheless, I hope that I have also shown how these two modes of criticality can still be useful for expanding the scope of belief systems and conversations, and the inclusiveness of discussions. If that is so, then they should not be discarded. However, again, when someone judges scope or inclusiveness s/he does it based on her/his own readings of reality, and then we are apparently back where we started. But we are actually not: After a critical engagement—a critical conversation and/or a critical discussion—the critical person will have expanded, in her view, the scope of her/his readings of reality. And perhaps also in other persons' views, but whether this is so and the particular aspects about which others will make that judgment may vary, depending on their own readings of reality. This way, criticality presents itself in something that is more like a particular attitude than a particular set of questions, understanding or awareness, method, reading of readings of reality, or kind of knowledge. And it can serve as an ideal that guides a person's construction of knowledge, internally. Critique does not reveal basic assumptions, contexts of meaning, conditions of possibility or meaningfulness, or systemic boundaries of exclusion/ inclusion. Neither does it reveal the nature of interactions giving rise to the production or reproduction of knowledge. Critique does not reveal in general anything, anymore than a question reveals its answer; or, better, it simply does not reveal anything. It simply propels us to keep improving our beliefs, and perhaps our actions too, but there is no epistemologically special knowledge to be had at the end.

⁷⁵ I take this as the more general idea conveyed by his texts in this respect, and with his conversational view of all forms of knowledge. However, this does not mean that he has always been consistent with this, as is evidenced by the fact that in Philosophy and the Mirror of Nature he does seem to regard his own work as disclosing basic assumptions (Rorty, 1979). Criticality as disclosing basic assumptionswhich are no other than foundational beliefs for a particular form of knowledge—would go against that

Furthermore, whatever judgement about criticality, either in the object or in the process mode, can only be *local*, in the not clarifiable, not specifiable, and not determinable sense given by the fact that we know that we must surely ignore many things—while granting that one must know and be right about many others. That is, there is a limited sense in which one can know limitations of one's belief system: There may be relevant persons one knows, that one has not engaged with in discussion; and there may be relevant belief systems one knows, that one has not made to engage one's own in conversation. But that knowledge of persons and belief systems only corresponds to what has been available to one. In this sense those critical judgements can only be local, where localness refers to the availability of alternatives that one has had in one's life

There is also something to be said about the critical person: According to these conclusions s/he does not only know that it is possible that a person or belief system have not been considered in a discussion or conversation, or that there are ways of improving them. S/he does not simply look at the discussion or conversation from without when being critical. S/he in a sense always takes part in the debate, even if s/he keeps her/his views to her/himself. S/he is nothing more and nothing less than another participant in what Rorty has called the "conversation of humankind" (1979). The critical person should not adopt the arrogance whose legitimacy has traditionally been conferred to her/him by criticality, and instead s/he should use it humbly to attempt to improve her/his own thinking.

10.2.2 For Systems Thinking

It is not uncommon within the systems movement that different authors have very different understandings of the *system* idea. Something common that appears, however, is the relation that is established between the elements that constitute a system, and between them and the system boundary that defines them as elements of the system. I

general idea just mentioned.

have already explained in section 6.6.1 that the impossibility of fulfilling the givenness requirement suggested that the way in which the system idea has been used in the more interpretivist approaches failed in implicitly regarding system boundaries as problematic, while not problematising the elements that constitute the space on which those boundaries are drawn. The problem lies in the adoption by the authors in the systems movement, of the scheme-content distinction—the system boundary providing the scheme—which in this case has been fed with some aspects of the Kantian version of that distinction (see Checkland, 1981; Ulrich, 1983; and Midgley, 2000).

Should then the *system* idea be rejected as a central concept for criticality? I take it that the changes should not be so drastic, and that a lighter reformulation will be enough. Indeed, I think that it can be safely said that the framework for understanding knowledge imposition formulated in chapters 8 and 9 is essentially systemic. Furthermore, the criticisms presented here on the system idea as currently used by the authors reviewed, come from a view of knowledge and interpretation that is acknowledged to be radically holistic. Paradoxically, this view suggests that the critical use to which the system idea has been put relies on a rather reductionistic understanding of those issues which are so central to language.

I will not attempt now to carry out that reformulation of the system idea, as that is beyond the scope of the present project. Instead, I will simply try to provide a few basic points that it should take into account, and that are derived from the discussions in this study. The first one of them refers to the various elements that can be used to provide descriptions of systems—implemented, proposed, or mentally constructed—and which include Ulrich's boundary judgements (1987), Checkland's CATWOE (1981), and Espejo's TASCOI (Espejo and Bowling, 1999). These descriptions can still be useful for critically inquiring into limitations of particular forms of knowledge⁷⁶, but it should not be assumed that just by asking the questions, the answers will come about unproblematically. Moreover, even though these ways of describing systems are similar and share some elements, the differences can be explained in terms of the different purposes these authors had. Similarly, for my purposes related with the problem of

knowledge imposition, knowledge systems are described mainly in terms of belief systems and persons that have or have not been engaged with in conversations or discussions, respectively, as well as in terms of the kinds of conversations or discussions had. These elements could be thought of, if one wants to speak that way, as boundaries of knowledge systems. However, one would have to be cautious and accept only a mild sense of *boundary*, particularly one that does not presuppose the space of elements on which it is drawn. The acknowledgement of this would take us in the direction of postulating the existence of an epistemological double link between the system boundary and the space of elements: Knowledge of boundaries depends on the space of elements, while knowledge of the space of elements depends on the boundary of the knowledge-system used.

Another element for a reformulation of the system idea is the suggestion that we should not make the distinction between mental constructions and representations of things out there. If sentences and beliefs should not be regarded as representing anything, as was explained in chapter 6 following Davidson's and Neil's arguments, then one would have to answer the question about the status of systems. Some things are worth considering about this issue. In Ulrich's view of systems, the idea that one could question boundary judgements was partly based on the finding that in the realm of the practical there are necessarily normative elements, and on the idea that their justification proceeds in a radically different way as compared with factual elements⁷⁷. Nothing in the view of language presented here, however, suggests that there are any differences, as concerns the problem of justification, between normative and factual assertions⁷⁸. Because of this, the notion of boundary should not be based on the idea of the normative; and no impossibility of expertise should be postulated based on the need for normative judgements. In fact, neither does anything in this view suggest that there is a distinction between arbitrary and non-arbitrary elements that constitute a reading of reality—which would be just another instance of the scheme-content distinction. Boundary should

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⁷⁶ It should be said that while Ulrich's purpose was the critical emancipatory one of disclosing limitations of forms of knowledge, that does not seem to be the case in Checkland's or Espejo's cases. Nothing prevents one, nevertheless, from using those descriptions of systems in a critical emancipatory way (see Flood and Romm, 1996; and Jackson, 1990b and 2000).

⁷⁷ In fact, this differentiation in Ulrich's case is arguably derived from a representationalist view of language, in the case of factual or theoretical sentences, which would not be replicated in the case of normative or practical sentences.

⁷⁸ This is, of course, another consequence of the holistic view of knowledge and interpretation (see Rorty, 1979 and 1991b).

rather be linked to the recognition of elements which may bring about potential improvement of one's knowledge. But there is no guarantee that this improvement will ever take place⁷⁹.

A last point to be made regarding systems thinking concerns the idea of intervention, and particularly that of facilitation as a special instance. Eden (1993) and Gregory and Romm (2001) have discussed various issues concerning the relations between facilitators and participants in group discussions that attempt to be learning processes. One issue here is whether the facilitator should restrict her/his contributions to the process, or whether s/he might be able to present her/his own views—and therefore the *content* of her/his beliefs—without by this fact exerting some authority that may limit the autonomy of thinking of the participants. The arguments concerning interpretation independence presented in chapters 7 and 9 suggests that if the facilitation involves some kind of interpretation of the various views of the participants, especially in a critical way, the facilitator's views may get involved in the conversation *anyway*. In this sense, attempts to render this process visible and conscious, so as to still make those views available for criticism, seem more appropriate than the attempt to exclude those views.

10.2.3 For Pedagogy

In the introduction I explained that this whole project could be taken as a big "if... then...", acknowledging that it may not always be the best thing to do to actively attempt to prevent the imposition of knowledge. It might clash against other goals which, at a given moment, may be more urgent or important. Importantly, however, even if the goal is the prevention of knowledge imposition, what I have argued here shows that there cannot be an authentic and complete autonomy of thinking such that all the knowledge constructed by someone can safely be said to be her/his own. There are various reasons why this is so, that come from the present study: Firstly, neither one

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⁷⁹ Let us notice that if one accepts the boundary idea as a selection from among basic aspects, any new aspects considered will be an improvement. Here no such assumption is made.

nor anyone else can know what it is that one knows—and, a fortiori, that one does not know—in an exhaustive way, in the sense that redescriptions of one's knowledge made by others may show that one was *presupposing*, *implying*, or *meaning* something that one may not actually have been aware of. A second reason has already been discussed in section 10.1.1, and is actually derived from this first point just mentioned: The prevention of knowledge imposition can only occur within the possibilities or one's recognition of forms of knowledge, which depends, via interpretation, on the very beliefs *one* holds *at the moment*. And in that sense it can be said that some form of imposition is inevitable, given that one's knowledge must surely be incomplete and in some aspects plainly wrong.

What one can do in a classroom—or indeed in any other situation in which knowledge is produced and/or reproduced—is to try to make sure that there are appropriate spaces where critical conversations and critical discussions develop. This would be criticality being used in an object mode, but at the same time it necessarily requires its use in a process mode by the participants in that discussion, thus expanding inclusiveness and scope. In the case of critical discussions, those include spaces of critical thinking—in a process mode—about the classroom discussions, about the participants' relevant histories, and about the production of external forms of knowledge. In the case of critical conversations, it includes spaces for critically engaging immediately available and non-immediately available belief systems. The organisation of all these spaces should, of course, try to guarantee some form of equality of voices, such that single voices are not allowed to dominate and be the only relevant ones to be heard. But, as I have tried to demonstrate, judgements by someone about that equality also depend on her/his readings of reality, unless only non-semantic aspects of the interactions are used for that purpose. This suggests that one should only use protocols dealing with nonsemantic aspect of interactions (in the style of Syntegration, see Espinosa, 2000), or aspects for which the interpretation required is so general that it does not reflect differences in readings of reality. But at the same time, as argued in chapter 5, these aspects are not enough for the prevention of knowledge imposition and the development of autonomy of thinking. Given this, this process of questioning and organising those spaces of interactions and critical engagements should itself be nourished by the very belief systems entering the conversations, and particularly their entailed views on the critical issues of scope and inclusiveness related to that very process. Because of this, it can be said that there should be present a *recursive* process of self-questioning (similar in this sense to the way Midgley, 1997, suggests that Ulrich's CSH can be used).

The various critical approaches in education reviewed here, we have seen, are not able to prevent knowledge imposition in some of its forms. Furthermore, they seem to be blind to them. I certainly do not claim that the present proposal does help prevent knowledge imposition exhaustively. It simply cannot. What it tries to do is understand what it means to use all the resources available for the identification and critical questioning of forms of knowledge, and the prevention of their imposition in *particular*. It is still blind to forms of knowledge imposition, because whatever forms of knowledge that cannot be identified with the resources available, cannot therefore be questioned. But in a more general sense, it is not blind: It accepts that there must be some imposition that always passes undetected. Given this, it does not carry with it the arrogance proper to most proposals for criticality.

10.3 LINES OF FURTHER INQUIRY OR RESEARCH

The basic elements for a framework that I provided in chapters 8 and 9 should, then, be useful as a source of questions that allow for the inquiry into, and understanding of, the possible existence of various forms of knowledge imposition in a classroom. Indeed, it is in principle applicable also to other processes in which knowledge is produced and/or reproduced. Examples of these are organisational learning, and research into meaning. About the latter, it should be clear by now that meaning, as an object of inquiry or research, is not separable from reality as an object of inquiry. But, let me repeat this, these inquiry and understanding do not represent a view from above, and instead they automatically turn the inquirer into a participant in the conversation, even if s/he is not visible or cannot influence the other participants. Furthermore, this suggests that any inquiry into knowledge imposition in the classroom should privilege forms of empirical research—research based on occasional sentences—in which the participants are

somehow co-researchers. Otherwise single readings of reality may be imposed, this time in the name of research

As a result of research, of course, the framework itself may be changed. Some of those changes cannot be anticipated, because they depend on unforeseeable contributions by others—including participants in knowledge-production processes—and on other not-definable variables. At the anticipation of some other changes one may have a go, though, and that is what can be specified as future lines of research.

Let me start with some aspects which seem to be more closely linked to the issues discussed here, to then proceed to discuss in the next section other aspects that have not been mentioned at all in this study but that seem to nevertheless be extremely important. A first one consists in the development of techniques which can help its users inquire into and understand processes of knowledge production in terms of knowledge imposition. So far, the framework elements from chapters 8 and 9 can be used to formulate questions and focus one's attention on certain elements that are central or simply relevant for understanding those processes. The techniques that I think should be constructed should be, just like those framework elements provided here, content*empty*; for otherwise their entailed contents would be imposed from the start. But they should be made more palatable on the one hand, and on the other more powerful so that their users can inquire into knowledge imposition in a much more detailed way. For example, what kinds of elements might describe in a finely detailed way spaces of interactions and spaces of possibilities? In this, existing tools and techniques developed by the critical approaches currently available in the literature can be useful, and might be incorporated—even if in an imperialistic way (see Jackson, 1999). I have also already mentioned at the end of section 10.1 how various other contributions by other approaches might also be incorporated. In some cases this can happen in a more straightforward manner—simply taking into account the limitations described here whereas in other cases there might still be need for a lot of research that helps develop more appropriate pedagogical tools and techniques. But in any case, those techniques will have to be tried out in actual pedagogical practices. This represents something that I could label the development of the framework as an observational tool. observational tool can be useful for at least two purposes: First, as an instrument for systematic empirical research about what occurs in actual schools—or other sites of knowledge production and reproduction—in relation to their capacities to promote autonomy of thinking and to prevent knowledge imposition; and second, as an observational instrument for teachers—and students⁸⁰—to observe their own pedagogical practices, reflect on them, and possibly modify them. In this second case, the idea is not to be tremendously systematic, but to have tools that can be used in everyday classroom situations as they happen. I have already started some work along this line.

Additionally, the framework can serve to interrogate existing pedagogical practices or policies, as regards the way they do or do not help prevent knowledge imposition. This work can be done both at a more empirical level and at a more theoretical level, and the idea is to see how they perform when one takes as a criterion the prevention of knowledge imposition. For instance, constructivist pedagogical proposals seem to be presently acquiring an almost unquestionable status, and seem to be in the way of becoming the norm for primary and secondary schools in Colombia, both public and private. But one may of course ask, to what extent are these pedagogies promoting the development of autonomy of thinking?

Another aspect for future development consists in the determination of context elements and technologies that could facilitate or hinder the production of critical discussions and critical conversations. At the risk of making an incorrect distinction, in some sense it can be said that the analyses made here shed light into knowledge imposition and autonomy of thinking as such, but not into what other elements might facilitate or contribute to their production. That seems to require a much more empirical approach than the one used here. Here, again, existing technologies developed in other domains or disciplines might be helpful for this purpose. The framework developed would then be useful in helping examine their characteristics in relation to knowledge imposition, and hence also in determining the kind of contribution they could make. The issue here is of a very practical nature, because it attempts to help teachers know what to do if they want to promote autonomy of thinking and prevent knowledge imposition in their classrooms. The question is, what other elements that I, as a teacher, can have some

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⁸⁰ Interestingly, the whole discipline of pedagogy seems to be oriented towards the actions carried out by the teacher, and not those carried out by the students. There may be some reasons for this, like the fact that much of the pedagogical theory is about the issue of how to get *children* to learn. But this should not

influence on, will causally affect the prevention of knowledge imposition in my classroom? Importantly, work in this direction can be seen as in essence of the kind that would also correspond to the improvement of the various critical approaches in education and systems thinking. For this reason, this development work can and should also be informed by the developments occurring in those approaches.

One kind of those context elements that may prove to be of central importance for the problems dealt with here, is that which comprises the emotional. I have not touched on that topic, but the emotional investment that someone may have on specific beliefs or belief systems seems to be of central importance for the issues of how one understands and assesses belief systems. These have sometimes been taken into account by some approaches, like critical and post-radical pedagogies, in the first case as a tool for highlighting the partiality of belief systems or of espoused views, and in the second also for pointing at the shortcomings of a universalistic critical pedagogy (see for instance Turnbull, 1998; and also subchapters 2.3 and 2.4). But arguably both of these positions are prone to the imposition of the critical person's own readings of reality. Therefore there is still the question about how to deal with emotions if one is to fully acknowledge its centrality but at the same time not assuming a critical arrogant position from which one's interpretation is unproblematically taken for granted.

A related though different issue is the one about the transformation of the body that knows and acts. This project has mainly studied the possibilities of critical reflection, but no mention has been made of the embodiment of the particular knowing and acting capacities of the individual along the line of the work of, for instance, Merleau-Ponty and Dreyfus. In the day-to-day behaviour of the individual, s/he would observe and act according to what her/his body is prepared to, without the necessary intervention of conscious reflection. Indeed, Dreyfus has suggested that the process of embodiment of forms of observation and action takes place in a rather gradual process which he characterises as comprising some stages (1996). Taking this new issue into account might displace the emphasis from *rational method*, represented in this case in systems of questions to be answered so that critical reflection occurs, to the processes by which an individual not only modifies her/his belief systems in an espoused way, but also

always be a restriction.

translates those modifications into spontaneous day-to-day observation and action. In chapter 7 I suggested that both immediately available and non-immediately available belief systems should be inquired upon so that they can be brought into the conversation. This entails in the first case the investigation of the individual's [spontaneous] everyday actions, which might not have been made conscious by her/himself and which therefore might be different from her/his espoused belief systems (see for instance Argyris and Schön, 1978). However, this is surely not enough for dealing with all the important implications of Merleau-Ponty's and Dreyfus' arguments: For example, it can be said that it has been assumed throughout this whole document, that a person automatically modifies her/his long-term beliefs and behaviour as a result of the engagement with other belief systems and the later adoption of belief commitments. That assumption may be a wrong one, because belief commitments may never actually translate into actual practice of believing and acting accordingly.

Another point refers to the relation between reflection and praxis. As I explained in the introduction to this document, it was not within the scope of this study to deal with issues of action, including the imposition of actions. However, autonomy of thinking and knowledge imposition should also be seen in relation to other things—which are in some sense external to it—including the potential positive and negative results of the use of these ideas to inform the [re]design of conversations and discussions. This is not the same as instrumentalising criticality to serve an external purpose, and then assessing its efficiency and effectiveness in helping achieve that purpose. Instead, it is to broaden the scope and think of other aspects which are relevant to an overall set of important notions and practices in our societies, like democracy, autonomy of action, identity, and so on. A crucial question that in this respect has been posed by critical pedagogues, concerns the possibility of achieving social transformation without the imposition of a single reading of reality or vision of the future, given the limited power of individual or small-group action. While postmodernist and poststructuralist pedagogical thinking has argued against repressive drives for consensus, and critical pedagogical thinking has emphasised the need to create strong social groups with a common goal of transforming specific aspects of social reality, the position adopted here takes neither consensus nor dissent as what should be obtained or preserved in conversation or discussion. How, then, can social action occur?

The previous possible lines of future research correspond to the recognition of the possibility that specific work by others might help the present endeavour. Their potential contributions have been relatively well-identified. However, I think that it is also important to acknowledge that there might be other potentially relevant sources of relevant ideas that could better inform this project, even if their contributions are not really clear at the moment. For instance, most of the literature reviewed is that published in the English language. And particularly, literature by authors writing in Spanish might relate more closely, in some not-yet-determined manner, to the context in which most probably these ideas will be used by myself (Colombian educational centres like universities and schools). Similarly, it is also important to consider that the adoption of the critical attitude that is entailed by critical conversations and critical discussions may be in conflict with fundamental elements of the thinking and action of those persons that it is supposed to help. These possible conflicts should be investigated, but there still remains the question of what to do in such cases. It seems to me that the final answer will lie on the ethics of the critical inquirer or researcher. Is it justified in each particular case to impose the adoption of the critical attitude? As I said in the introduction, this study should be regarded as involving a big "if... then..." clause, and the central ethical question of whether to proceed is surely to be answered in conditions of uncertainty.

10.3 A FINAL COMMENT

The endeavour of undertaking this project has certainly been a difficult one. I have finally arrived at something that I can consider in some mysterious sense *my own*, even granting that in another sense I am nothing but the result of everything that preceded me. After so much time spent in reading, writing, thinking, talking, and listening, this document is the result of a tremendous academic effort, like I assume most PhDs are. It also represented a great effort in personal terms, particularly for my wife who has unconditionally accompanied me in this, sacrificing partly her career and the closeness to her family and friends. On another dimension, it was also a great financial effort, mostly by the Colombian government through its science-promoting institution

Colciencias, specially taking into account that a country like mine has problems more complex and urgent than—I could bet on it—any non-Colombian reader can imagine. There are many different debts, then, that I have acquired by embarking on this project. The latter one, however, is directly related to this study in that it is through its relevance for the present and future of Colombia that I will be able to pay back part of the debt. It still is a challenge to be able to produce an impact, even if only a minor one. But can it produce it, at a moment in which things like freedom, autonomy, and living a life with dignity have become a luxury in Colombia, because just staying alive is the most urgent concern? This issue has been in my mind for some time, but seems to be specially painful when I have sometimes waken up at night with the deep worry that all this might be a merely academic exercise. This means that I further need to demonstrate that it is not. That demonstration is, however, no longer theoretical, not even empirically descriptive, but crucially prescriptive. It can only be through my action that something may be done to demonstrate it. I only hope I will have the strength.

REFERENCES

- Alcoff, L. (1988). <u>Cultural Feminism vs. Poststructuralism: The Identity Crisis in Feminist</u>
 <u>Theory.</u> In *Signs*, vol.13, 405-436.
- Alexander, H. (1996). Rationality and Redemption: Ideology, Indoctrination and Learning Communities. In Philosophy of Education 1996: Proceedings of the 52nd Annual Meeting of the Philosophy of Education Society.
 - http://www.ed.uiuc.edu/EPS/PES-Yearbook/96_docs/alexander.html [April 2002]
- Apple, M. (1999). <u>Freire, Neo-liberalism and Education</u>. In *Discourse*, vol.20, no.1, 5-20 (special edition on studies in the cultural politics of education).
- Arcilla, R. (1995). For the Love of Perfection. Richard Rorty and Liberal Education. Routledge, New York.
- Argyris, C. and Schön, D. (1978). Organizational Learning: A Theory of Action Perspective. Reading, Massachussets.
- Aronowitz, S. (1993). <u>Paulo Freire's Radical Democratic Humanism</u>. In P. McLaren and P. Leonard (eds.), *Paulo Freire: A Critical Encounter*. Routledge, London, 8-24.
- Banathy, B.H. (1988). <u>Matching Design Methods to System Type</u>. In *Systems Research*, vol.5, 27.
- —— (1991). Systems Design of Education: A Journey to Create the Future. Educational Technology, Englewood Cliffs.
- —— (1992). <u>Designing Educational Systems: Creating our Future in a Changing World</u>. In *Educational Technology*, vol.32, no.10, 32-34.
- Barth, E. and Krabbe, E. (1982). From Axioms to Dialogue. DeGruyter, Berlin.
- Bavelas, A. (1952). <u>Communication Patterns in Problem Groups</u>. In *Cybernetics: Transactions of the Eighth Conference, 1951*. Josiah Macy Jr., New York.
- Beer, S. (1994). Beyond Dispute: The Invention of Team Syntegrity. Wiley, Chichester.
- Biesta, G. (1998). The Right to Philosophy of Education: From Critique to

 Deconstruction. In Philosophy of Education 1998: Proceedings of the 54th Annual Meeting of the Philosophy of Education Society. www.ed.uiuc.edu/EPS/PES-Yearbook/1998/biesta.html [April 2002]
- Bilow, S. (1997). <u>Rationality Overrated?</u> In *Philosophy of Education 1997: Proceedings of the 53rd Annual Meeting of the Philosophy of Education Society.*

- http://www.ed.uiuc.edu/EPS/PES-Yearbook/97_docs/bilow.html [April 2002]
- Brady, J. (1994). <u>Critical Literacy</u>, Feminism, and a Politics of Representation. In P. McLaren and C. Lankshear (eds.), *Politics of liberation: Paths from Freire*. Routledge, London, 142-153.
- Buckingham, D. (1998). <u>Introduction: Fantasies of Empowerment? Radical Pedagogy and Popular Culture</u>. In D. Buckingham (ed.), *Teaching Popular Culture Beyond Radical Pedagogy*. UCL, London, 1-17.
- Burbules, N. (1993). Dialogue in Teaching: Theory and Practice. Teachers College, New York.
- —— (1995). <u>Forms of Ideology-Critique: A Pedagogical Perspective</u>. In P. McLaren and J. Giarelli (eds.), *Critical Theory and Educational Research*. State University of New York, Albany, 53-69.
- (1998). Modes of Criticality as Modes of Teaching (Reply to Biesta). In Philosophy of Education 1998. Proceedings of the Annual Meeting of the Philosophy of Education Society. http://www.ed.uiuc.edu/EPS/PES-Yearbook/1998/burbules.html [April 2002]
- —— (1998). Modes of Criticality as Modes of Teaching. In Philosophy of Education 1998:

 Proceedings of the 54th Annual Meeting of the Philosophy of Education Society.

 www.ed.uiuc.edu/EPS/PES-Yearbook/1998/burbules.html [April.2002]
- Burbules, N., and Berk, R. (1999). <u>Critical Thinking and Critical Pedagogy: Relations</u>, <u>Differences</u>, and <u>Limits</u>. In T. Popkewitz and L. Fendler (eds.), *Critical Theories in Education: Changing Terrains of Knowledge and Politics*. Routledge, New York, 45-65.
- Checkland, P. (1981). Systems Thinking, Systems Practice. Wiley, Chichester.
- —— (1995). <u>Model Validation in Soft Systems Practice</u>. In *Systems Research*, vol.5, no.1, 47-54.
- Checkland, P. and Scholes, J. (1990). Soft Systems Methodology in Action. Wiley, Chichester.
- Chouliaraki, L. (1996). <u>Regulative Practices in a 'Progressivist' Classroom: 'Good Habits' as a 'Disciplinary Technology'</u>. In *Language and Education*, special issue on *Discursive Construction of Educational Identities*, vol.10, no.2 and 3, 103-118.
- Church, A. (1956) Introduction to Mathematical Logic. Princeton University, Princeton.
- Churchman, C. (1971). The Design of Inquiring Systems: Basic Concepts of Systems and Organization.

 Basic Books, New York.
- —— (1979). The Systems Approach. 2nd ed., Dell, New York.
- Cohen, (1988). <u>The Perversions of Inheritance</u>. In P. Cohen, and H. Bains (eds.), *Multi-Racist Britain*. Macmillan, London.

Culler, J. (1983). On Deconstruction: Theory and Criticism After Structuralism. Cornell University, Ithaca. Davidson, D. (1967). Truth and Meaning. In Inquiries into Truth and Interpretation. Clarendon, Oxford, 17-36, 1984. — (1973). <u>Radical Interpretation</u>. In *Inquiries into Truth and Interpretation*. Clarendon, Oxford, 125-139, 1984. — (1974a). On the Very Idea of a Conceptual Scheme. In Inquiries into Truth and Interpretation. Clarendon, Oxford, 183-198, 1984. — (1974b). Belief and the Basis of Meaning. In *Inquiries into Truth and Interpretation*. Clarendon, Oxford, 141-154, 1984. — (1982). A Nice Derangement of Epitaphs. In E. LePore (ed.), Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson. Blackwell, Oxford, 433-446, 1986. — (1983). A Coherence Theory of Truth and Knowledge. In E. LePore (ed.), Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson. Blackwell, Oxford, 307-319, 1986. (1984). Introduction. In Inquiries into Truth and Interpretation. Clarendon, Oxford, xiii-XX. — (1988). The Myth of the Subjective. In M. Krausz (ed.), Relativism. Interpretation and Confrontation. University of Notre Dame, Notre Dame, 159-172, 1989. – (1990). <u>The Structure and Content of Truth</u>. In *Journal of Philosophy*, vol.87, no.6, 279-328. — (1991). Three Varieties of Knowledge. In A. Phillips (ed.), A.J. Ayer: Memorial Essays. Cambridge University, Cambridge, 153-166. — (1995). <u>The Objectivity of Values</u>. In C. Gutiérrez (ed.), E*l Trabajo Filosófico de Hoy en* el Continente. ABC, Bogotá, 59-69. (1998). Who Is Fooled? In J.-P. Dupuy (ed.), Self-deception and Paradoxes of Rationality. CSLI, Leland Stanford Junior University, 1-18. — (1999a). <u>Is Truth a Goal of Inquiry? Discussion with Rorty</u>. In U. Zeglen (ed.), Donald Davidson. Truth, Meaning and Knowledge. Routledge, London — (1999b). Reply to John McDowell. In L. Hahn (ed.), The Philosophy of Donald Davidson. Open Court, Peru (Illinois), 105-108. — (1999c). Reply to Richard Rorty. In L. Hahn (ed.), The Philosophy of Donald Davidson. Open Court, Peru (Illinois), 595-600. — (2000). Truth Rehabilitated. In R. Brandom (ed.), Rorty and His Critics. Blackwell,

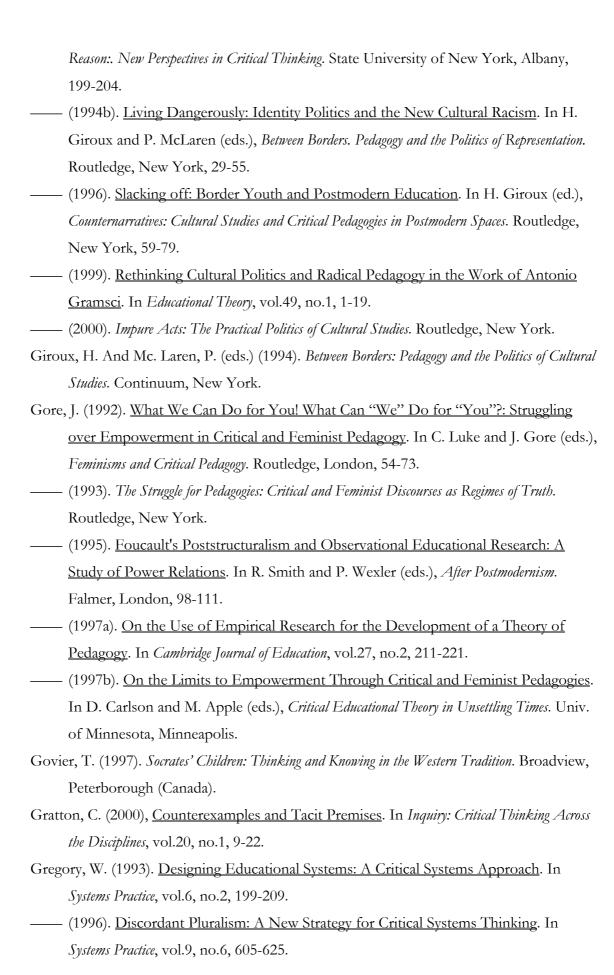
- Malden, 65-74.
- (2001). <u>Introduction</u>. In *Subjective, Intersubjective, Objective*. Clarendon, Oxford, xiii-xviii.
- Delin, P., Chittleborough, P and Delin, C. (1994). What Is an Assumption? In *Informal Logic*, vol.16, no 2, 115-122.
- Dreyfus, H. (1996). The Current Relevance of Merleau-Ponty's Phenomenology of Embodiment. In Electronic Journal of Analytic Philosophy, vol.4, spring 1996. http://ejap.louisiana.edu/EJAP/1996.spring/dreyfus.1996.spring.abs.html [April 2002]
- Duhan Kaplan, L. (1991). <u>Teaching Intellectual Autonomy: The Failure of the Critical</u>
 <u>Thinking Movement</u>. In K. Walters (ed.), *Re-Thinking Reason: New Perspectives in Critical Thinking*. State University of New York, Albany, 205-219, 1994.
- Ebert, T. (1991). <u>Political Semiosis in/of American Cultural Studies</u>. In *American Journal of Semiotics*, vol.8, nos.1 and 2, 113-135.
- Eden, C. (1993). From the Playpen to the Bombsite: The Changing Nature of Management Science. In Omega, vol.21, 139-154.
- El Espectador. (2002). Vínculos Farc-Venezuela Dividen Opiniones. 1st of February.
- Elias, J. (1994). Paulo Freire: Pedagogue of Liberation. Krieger, Malabar (USA).
- Ellsworth, E. (1989). Why Doesn't This Feel Empowering? Working Through the Repressive Myths of Critical Pedagogy. In Harvard Educational Review, vol.59, no.3, 297-324.
- —— (1997). Teaching Positions: Difference, Pedagogy, and the Power of Address. Teachers College, New York.
- Ennis, R. (1982), <u>Identifying Implicit Assumptions</u>, In *Synthese*, vol.51, 61-86.
- —— (1995). Critical Thinking. Prentice Hall, Upper Saddle River.
- Espejo, R. And Bowling, D. (1999). Viplan Learning System. Syncho Ltd.
- Espinosa, A. (2000). <u>Creating a Democratic Learning Context: An Experience in the Use of Syntegration for this Purpose</u>. In *Proceedings of the 2001 ISSS Conference: Understanding Complexity: The Systems Sciences in the New Millennium*, Toronto.
- Feyerabend, P. (1972). <u>How to Be a Good Empiricist</u>. In H. Morick (ed.), *Challenges to Empiricism*. California University, Belmont.
- Fisher, A., and Scriven, M. (1997). *Critical Thinking: It's Definition and Assessment*. Edgepress, Point Reyes (USA).
- Flood, R.L. (1990). Liberating Systems Theory: On Systems and Inquiry. Plenum, New York.
- —— (1995). Solving Problem Solving: A Potent Force for Effective Management. Wiley, Chichester.

- Flood R. and Jackson, M. (1991). *Creative Problem Solving: Total Systems Intervention*. Wiley, Chichester.
- Flood, R., and Romm, N. (1995). <u>Enhancing the Process of Choice in TSI, and Improving the Chances of Tackling Coercion</u>. In *Systems Practice*, vol.8, no.4, 377-408.
- —— (1996). Diversity Management: Triple Loop Learning. Wiley, Chichester.
- Fodor, J., and LePore, E. (1991). Why Meaning (Probably) Isn't Conceptual Role. In Mind and Language, vol.6, no.4.
- (1992). Holism: A Shopper's Guide. Blackwell, Oxford.
- Foucault, M. (1977). Discipline and Punish: The Birth of the Prison. Pantheon, New York.
- —— (1978). What Is Critique? In J. Schmidt (ed.), What is Enlightenment? Eighteenth Century Answers and Twentieth Century Questions. University of California, Berkeley, 382-398, 1996.
- —— (1980). <u>Truth and Power</u>. In C. Gordon (ed.), *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*. Pantheon, New York, 109-133.
- Freire, P. (1970). Pedagogy of the Oppressed. Seabury, New York.
- —— (1973). Education for Critical Consciousness. Seabury, New York.
- —— (1978). Pedagogy in Process: The Letters from Guinea-Bissau. Continuum, New York.
- —— (1994a). Pedagogy of Hope: Reliving Pedagogy of the Oppressed. Continuum, New York.
- —— (1994b). Reading the World and Reading the Word: An Interview with Paulo Freire.

 Interview for the journal Language Arts in 1985. Reprinted in W. Hare and J.P.

 Portelli, Philosophy of Education: Introductory Readings. 2nd edition, Detselig, Calgary.
- Freire, P., and Macedo, D. (1987). *Literacy: Reading the Word and the World*. Bergin & Harvey, Massachusetts.
- Frye, M. (1983). The Politics of Reality. Crossing, New York.
- Fuenmayor, R. (1990). <u>Systems Thinking and Critique</u>. I. What Is <u>Critique?</u> In *Systems Practice*, vol.3, no.6, 525-544.
- —— (1991a). <u>Self-Referential Structure of an Everyday-Living Situation</u>. In *Systems Practice*, vol.4, no.5, 439-472.
- —— (1991b). <u>Truth and Openness: An Epistemology for Interpretive Systemology</u>. In *Systems Practice*, vol.4, no.5, 473-490.
- —— (1997). <u>The Historical Meaning of Present Systems Thinking</u>. In *Systems Research and Behavioural Science*, vol. 14, no.4, 235-248.
- Fuenmayor, R., and López-Garay, H. (1991). <u>The Scene for Interpretive Systemology</u>. In *Systems Practice*, vol.4, no.5, 401-418.

- Fuenmayor, R., Bonucci, M., and López-Garay, H. (1991). <u>An Interpretive-Systemic Study</u> of the University of Los Andes. In *Systems Practice*, vol.4, no.5, 507-525.
- Gadamer, H. (1986) *Truth and Method.* 2nd revised edition in English, 1989, Continuum, New York, based on the revised and expanded 5th German edition, 1986.
- Geertz, C. (1976). From the Native's Point of View: On the Nature of Anthropological Understanding. In P. Rabinow and W. Sullivan (eds.), *Interpretive Social Sciences: A Reader.* University of California, Berkeley.
- Gitlin, T. (1995). The Twilight of Common Dreams. Metropolitan Books, New York.
- Giroux, H. (1979). Schooling and the Culture of Positivism: Notes on the Death of History. In Pedagogy and the Politics of Hope: Theory, Culture, and Schooling. Westview, Boulder, 3-34, 1997,.
- (1980a). Beyond the Correspondence Theory: Notes on the Dynamics of Educational Reproduction and Transformation. In Ideology, Culture and the Process of Schooling. Temple University, Philadelphia, 91-112.
- —— (1980b). <u>Teacher Education and the Ideology of Social Control</u>. In *Ideology, Culture* and the Process of Schooling. Temple University, Philadelphia, 143-159.
- —— (1983a). Theory and Resistance in Education. Bergin and Harvey, South Hadley.
- —— (1983b). <u>Ideology and Agency in the Process of Schooling</u>. In *Pedagogy and the Politics of Hope: Theory, Culture, and Schooling*. Westview, Boulder, 71-94, 1997.
- —— (1986). <u>Radical Pedagogy and the Politics of Student Voice</u>. In *Pedagogy and the Politics of Hope: Theory, Culture, and Schooling*. Westview, Boulder, 119-146, 1997.
- —— (1987). <u>Introduction: Literacy and the Pedagogy of Political Empowerment</u>. In P. Freire and D. Macedo, *Literacy: Reading the Word and the World*. Bergin & Harvey, Massachusetts.
- —— (1989). <u>Border Pedagogy in the Age of Postmodernism</u>. In *Pedagogy and the Politics of Hope: Theory, Culture, and Schooling*. Westview, Boulder, 147-163, 1997.
- —— (1990). <u>Rethinking the Boundaries of Educational Discourse: Modernism</u>, <u>Postmodernism</u>, and <u>Feminism</u>. In *Pedagogy and the Politics of Hope: Theory, Culture, and Schooling*. Westview, Boulder, 183-233, 1997.
- (1993a). <u>Disturbing the Peace: Writing in the Cultural Studies Classroom</u>. In *Pedagogy and the Politics of Hope: Theory, Culture, and Schooling*. Westview, Boulder, 164-179, 1997.
- —— (1993b). <u>Paulo Freire and the Politics of Postcolonialism</u>. In P. McLaren and P. Leonard (eds.), *Paulo Freire: A Critical Encounter*. Routledge, London, 177-188.
- —— (1994a). Toward a Pedagogy of Critical Thinking. In K. Walters (ed.), Re-Thinking



- Gregory, W. And Romm, N. (2001). <u>Critical Facilitation: Learning Through Intervention in Group Processes</u>. In *Management Learning*, vol.32, no.4, 453-467.
- Grossberg, L. (1994). <u>Introduction: Bringin' It All Back Home—Pedagogy and Cultural Studies</u>. In H. Giroux (ed.), *Counternarratives: Cultural Studies and Critical Pedagogies in Postmodern Spaces*. Routledge, New York, 1-25.
- Gur-Ze'ev, I. (1998). <u>Toward a Nonrepressive Critical Pedagogy</u>. In *Educational Theory*, vol.48, no.4, 463-486.
- Habermas, J. (1968). *Knowledge and Human Interests*. English translation, 1987, by Jeremy Shapiro. Polity, Cambridge.
- —— (1984). The Theory of Communicative Action. Vol. I. Reason and the Rationalization of Society. Beacon Press, Boston.
- —— (1987). The Theory of Communicative Action. Vol. II. Lifeworld and System: A Critique of Functionalist Reason. Beacon Press, Boston.
- Hamblin, C. (1970). Fallacies. Methuen, London.
- Haroutunian-Gordon, S. (1998). <u>Some Issues in the Critical Thinking Debate: Dead Horses and Red Herrings, Anyone?</u> In *Educational Theory*, vol.48, no.3, 411-425.
- Haywood, C. and Mac an Ghaill, M. (1997). <u>Materialism and Deconstructivism: Education</u> and the Epistemology of Identity. In *Cambridge Journal of Education*, vol. 27, no.2, 261-272.
- Heidegger, M. (1949). On the Essence of Truth. In *Basic Writings*. Routledge & Kegan Paul, London.
- Hintikka, J. (1987). The Fallacy of Fallacies. In Argumentation, vol.1, 211-238.
- hooks, b. (1989). Talking Back. South End, Boston.
- —— (1993). <u>bell hooks Speaking about Paulo Freire—The Man, his Work</u>. In P. McLaren, and P. Leonard (eds.), *Paulo Freire. A Critical Encounter*. Routledge, London.
- Horwich, P. (1998). Meaning. Oxford University, Oxford.
- —— (1999). <u>Davidson on Deflationism</u>. In U. Zeglen (ed.), *Donald Davidson: Truth, Meaning and Knowledge*. Routledge, London.
- Iedema, R. (1996). Save the Talk for After the Listening: The Realisation of Regulative Discourse in Teacher Talk. In Language and Education. Special issue on discursive construction of educational identities, vol.10, nos.2&3, 82-102.
- Illich, I. (1982). Gender. Pantheon.
- Jackson, M. (1985). <u>The Itinerary of a Critical Approach: Review of Ulrich's "Critical Heuristics of Social Planning."</u>. In *Journal of the Operational Research Society*, vol.36, no.9,

- 878-881. (1987). Present Positions and Future Prospects in Management Science. In Omega, vol.15. —— (1990a). Beyond a System of Systems Methodologies. In Journal of the Operational Research Society, vol.41. - (1990b). The Critical Kernel in Modern Systems Thinking. In Systems Practice, vol.3, no.4, 357-364. — (1991). Systems Methodologies for the Management Sciences. Plenum, New York. — (1992). <u>Interpretive Systemology and the Problem of Intervention</u>. In Systems Practice, vol.5, no.3, 329-333. —— (1993). <u>Don't Bite my Finger: Haridimos Tsoukas' Critical Evaluation of Total</u> Systems Intervention. In Systems Practice, vol.6, no.3, 289-294. — (1999). Towards Coherent Pluralism in Management Science. In Journal of the Operational Research Society, vol.50, no.1, 12-21. – (2000). Systems Approaches to Management. Kluwer, New York. Jackson, M. and Keys, P. (1984). Toward a System of Systems Methodologies. In R. Flood and M. Jackson (eds.), Critical Systems Thinking: Directed Readings. Wiley, Chichester, 139-158, 1991. Jackson, S., and Jacobs, S. (1980). Structure of Conversational Argument: Pragmatic Bases for the Enthymeme. In The Quarterly Journal of Speech, vol.46, 251-265. Johnson, R., and Blair, A. (2000). <u>Informal Logic: An Overview</u>. In *Informal Logic*, vol.20, no.2. Kahane, H. (1990). Logic and Contemporary Rhetoric: The Use of Reason in Everyday Life. Wadsworth, 5th edition. 1990.
- Keys, P. (1988) A Methodology for Methodology Choice. In Systems Research, vol.5.
- Kohli, W. (1991). Postmodernism, Critical Theory, and the "New" Pedagogies: What's at Stake in the Discourse? In Education and Society, vol.9, no.1, 39-46.
- —— (ed.). (1995). Critical Conversations in Philosophy of Education. Routledge, New York.
- Kraut, R. (1986). The Third Dogma. In E. LePore (ed.), Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson. Basil Blackwell, Oxford
- Kuhn, T. (1962). The Structure of Scientific Revolutions. The University of Chicago, Chicago.
- LePore, E. (1986). Truth in Meaning. In E. LePore (ed.), Truth and Interpretation: Perspectives on the Philosophy of Donald Davidson. Basil Blackwell, Oxford, 3-26.
- Levi, D. (1995). The Case of the Missing Premise. In Informal Logic, vol.17, no.1.

- López-Garay, H. (1991). <u>An Interpretive-Systemic Study of the Regional Planning</u>

 <u>Corporation of Los Andes in Venezuela</u>. In *Systems Practice*, vol.4, no.5, 491-505.
- Lorenzen, P. And Lorenz, K. (1978). *Dialogische Logik*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Luke, C. (1996). <u>Feminist Pedagogy Theory</u>. Reflections on Power and Authority. In *Educational Theory*, vol.46, no.3, 283-302.
- —— (1998). Pedagogy and Authority: Lessons from Feminist and Cultural Studies,
 Postmodernism, and Feminist Pedagogy. In D. Buckingham (editor), Teaching Popular
 Culture. Beyond Radical Pedagogy. UCL Press, London, 18-41.
- Lyotard, J.F. (1988). The Differend. Manchester University, Manchester.
- Maddock, T. (1999). <u>The Nature and Limits of Critical Theory in Education.</u> In *Educational Philosophy and Theory*, vol.31, no.1, 43-61.
- Malpas, J. (1992). Donald Davidson and the Mirror of Meaning: Holism, Truth, Interpretation.

 Cambridge University, Cambridge.
- Mason, R., and Mitroff, I. (1981). *Challenging Strategic Planning Assumptions. Theory, Cases, and Techniques.* Wiley, New York.
- Maturana, H. and Varela, F.. (1992). The Tree of Knowledge: The Biological Roots of Human Understanding, Transl. By J. Young, Shambhala, Boston.
- McCarthy, C. (1992). Why Be Critical? (Or Rational, or Moral?) On the Justification of Critical Thinking. In Philosophy of Education 1992, Proceedings of the 48th Annual Meeting of the Philosophy of Education Society.
 - www.ed.uiuc.edu/EPS/PES-Yearbook/92_docs/McCarthy.HTM [April 2002]
- McLaren, P. (1994). <u>Multiculturalism and the Post-modern Critique: Toward a Pedagogy of Resistance and Transformation</u>. In H. Giroux and P. McLaren (eds.), *Between Borders: Pedagogy and the Politics of Cultural Studies*. Routledge, New York, 192-222.
- (1996). <u>Liberatory Politics and Higher Education: A Freirean Perspective</u>. In H. Giroux (ed.), *Counternarratives: Cultural Studies and Critical Pedagogies in Postmodern Spaces*. Routledge, New York, 117-148.
- (1998). <u>Revolutionary Pedagogy in Post-Revolutionary Times: Rethinking the Political Economy of Critical Education</u>. In *Educational Theory*, vol.48, no.4.
- McLaren, P., and da Silva, T. (1993). <u>Decentering Pedagogy: Critical Literacy, Resistance, and the Politics of Memory</u>. In P. McLaren and P. Leonard, P. (eds.), *Paulo Freire*. *A Critical Encounter*. Routledge, London, 47-89.
- McMillan, C. (1997). Rationality as a Philosophical Problem. In Philosophy of Education 1997:

- Proceedings of the 53rd Annual Meeting of the Philosophy of Education Society. http://www.ed.uiuc.edu/EPS/PES-Yearbook/97_docs/macmillan.html [April 2002] McPeck, J. (1981). Critical Thinking and Education. St. Martin's Press, Oxford. —— (1992). <u>Teaching Critical Reasoning Through the Disciplines: Content Versus</u> Process. In R. Talaska (ed.), Critical Reasoning in Contemporary Culture. State University of New York, Albany, 31-49. — (1994). Critical Thinking and the "Trivial Pursuit" Theory of Knowledge. In K. Walters (ed.), Re-Thinking Reason. New Perspectives in Critical Thinking. State University of New York, Albany, 101-117. Mercer, K. (1992). Back to My Routes: A Postscript to the 80s. In D. Bailey and S. Hall (eds.), Critical Decade: Black British Photography in the 80s. Ten-8, vol.2, no.3, 32-39. Mejía, A. (2001). The Problem of Knowledge Imposition: Paulo Freire and Critical Systems Thinking. Research Memorandum No.29, The Centre for Systems Studies, The University of Hull. - (forthcoming). Reconstruction in Criticality: A Discussion on Questions, Assumptions, and Interpretation. To be published in *Inquiry: Critical Thinking Across* the Disciplines, 2002. Midgley, G. (1992). The Sacred and the Profane in Critical Systems Theory. In Systems *Practice*, vol.5, no.1, 5-16. - (1995). What Is this Thing Called Critical Systems Thinking? In Keith Ellis et al. (eds.), Critical Issues in Systems Theory and Practice. Plenum, New York. — (1996). Evaluating Services for People with Disabilities: A Critical Systems Perspective. In Evaluation, vol.2, 67. — (1997). Dealing with Coercion: Critical Systems Heuristics and Beyond. In Systems Practice, vol.10, no1., 37-57. (2000). Systemic Intervention: Philosophy, Methodology, and Practice. Kluwer, New York. Mingers. J. (1992a). Recent Developments in Critical Management Science. In Journal of the Operational Research Society, vol.43, no.1, 1-10. — (1992b). Fuenmayor's Interpretive Systemology—A Critical Comment. In Systems Practice, vol.5, no.3, 335-342.
- Missimer, C. (1989). Why Two Heads Are Better than One: Philosophical and Pedagogical Implications of a Social View of Critical Thinking. In K. Walters (ed.), Re-thinking Reason: New Perspectives in Critical Thinking. State Univ. of New York, Albany, 1994, 119-133.

- (1995a). Where's the Evidence? In Inquiry: Critical Thinking Across the Disciplines, vol.14, no.4. http://www.chss.montclair.edu/inquiry/summ95/missimer.html [April 2002] —— (1995b). Good Arguments: An Introduction to Critical Thinking. 3rd edition. Prentice Hall, Upper Saddle River. Mohanty, C. (1994). On Race and Voice: Challenges for Liberal Education in the 1990s. In H. Giroux and P. McLaren (eds.), Between Borders: Pedagogy and the Politics of Cultural Studies. Routledge, New York, 145-166. Morgan, G. (1986). Images of Organization. Sage, Beverly Hills. Moss, G. (1989). *Un/Popular Fictions*. Virago, London. Neale, S. (1995). The Philosophical Significance of Gödel's Slingshot. In Mind, vol.104, no.416, 761-825. — (1999). On Representing. In L. Hahn (ed.), The Philosophy of Donald Davidson. Open Court, Peru (Illinois), 657-666. Ohliger, J. (1995). Critical Views of Paulo Freire. http://nlu.nl.edu/ace/Resources/Documents/Ohliger1.html. [April 2002] Oliga, J.C. (1988). Methodological Foundations of Systems Methodologies. In Systems Practice, vol.1, no.1, 87-112. Orner, M., Miller, J., and Ellsworth, E. (1996). Excessive Moments and Educational <u>Discourses that Try to Contain Them.</u> In *Educational Theory*, vol.45, no.4, 71-91. O'Shea, A. (1993). Review of the book Sentimental Education: Schooling, Popular Culture, and the Regulation of Liberty, by J. Donald. In Media, Culture, and Society; vol.15, 503-510. Paul, R. (1992a). Teaching Critical Reasoning in the Strong Sense: Getting behind
- —— (1992b). Interview for the *Think Magazine*, April 1992 edition.

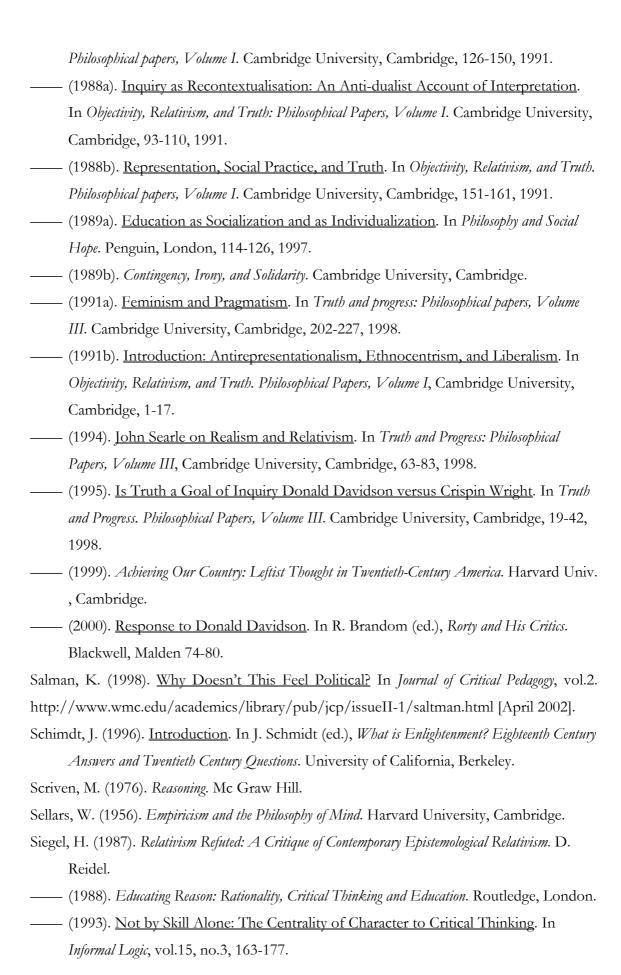
University of New York, Albany, 135-156.

— (1993). The Logic of Creative and Critical Thinking. In Critical Thinking. What Every Person Needs to Survive in a Rapidly Changing World. Foundation for Critical Thinking, Santa Ana. Revised 3rd edition, 101-121.

Worldviews. In R. Talaska (ed.), Critical Reasoning in Contemporary Culture. State

- (1994). Teaching Critical Thinking in the Strong Sense: A Focus on Self-Deception, World Views, and a Dialectical Mode of Analysis. In Kerry Walters, Re-Thinking Reason: New Perspectives in Critical Thinking. State University of New York, Albany, 181-198.
- Paul, R. and Adamson, K. (1987). <u>Critical Thinking and the Nature of Prejudice</u>. In R. Paul Critical thinking: What Every Person Needs to Survive in a Rapidly Changing World.

- Foundation for Critical Thinking, Santa Rosa, 1993.
- Pearson, A. (1994). You Drive for Show but You Put for Dough: A Facilitator's <u>Perspective</u>. In S. Beer, *Beyond Dispute: The Invention of Team Syntegrity*. Wiley, Chichester, 313-322.
- Peirce, C. (1955). Philosophical Writings of Peirce. Edited by J. Buchler. Dover, New York.
- Perelman, C. and Olbrechts-Tyteca, L. (1958). *The New Rhetoric: A Treatise on Argumentation*. University of NotreDame, Notre Dame, tranl. By J. Wilkinson and P. Weaver, 1969.
- Plumer, G. (1999) Necessary Assumptions. In Informal Logic, vol.19, no.1,41-61.
- Putnam, H. (1975). Mind, Language and Reality. Cambridge University, Cambridge.
- Quine, W., (1953a). Two Dogmas of Empiricism. In From a Logical Point of View: Nine Logico-Philosophical Essays. 2nd edition, Harvard University, Cambridge (U.S.A.), 20-46.
- (1953b). On What There Is. In From a Logical Point of View: Nine Logico-Philosophical Essays. Harvard University, Cambridge, 1-19, 1961.
- —— (1958). <u>Speaking of Objects</u>. In *Ontological Relativity and Other Essays*. Columbia University, New York, 1-25.
- (1960). Word and Object. Wiley, New York.
- —— (1969). <u>Ontological Relativity</u>. In *Ontological Relativity and Other Essays*. Columbia University, New York, 26-68, 1970.
- Ramberg, B. (2000). <u>Post-Ontological Philosophy of Mind: Rorty versus Davidson</u>. In R. Brandom (ed.), Rorty and His Critics. Blackwell, Malden, 351-370.
- Rattansi, A. (1992). <u>Changing the Subject? Racism, Culture and Education</u>. In A. Rattansi and D. Reeder (eds.), *Rethinking Radical Education*. Lawrence and Wishart, London.
- Robertson, E. (1997). Rationality and the Reach of Philosophical Argument. In Philosophy of Education 1997: Proceedings of the 53rd Annual Meeting of the Philosophy of Education Society. http://www.ed.uiuc.edu/EPS/PES-Yearbook/97_docs/robertson.html
- Romm, N. (1994). <u>Continuing Tensions Between Soft Systems Methodology and Critical</u>
 <u>Systems Heuristics</u>. Working Paper number 5. Centre for Systems Studies, University of Hull.
- —— (1995). Knowing as Intervention: Reflections on the Application of Systems Ideas. In *Systems Practice*, vol.8, no.2, 137-167.
- Rorty, R. (1979). Philosophy and the Mirror of Nature. Princeton University, Princeton.
- —— (1984). <u>The Historiography of Philosophy: Four Genres</u>. In *Truth and Progress*. *Philosophical Papers, Volume III*. Cambridge University, Cambridge, 247-273, 1998.
- —— (1986). <u>Pragmatism, Davidson, and Truth</u>. In Objectivity, Relativism, and Truth:



- (1995). Knowledge and Certainty; Feminism, Postmodernism, and Multiculturalism.
 In W. Kohli (ed.), Critical Conversations in Philosophy of Education. Routledge, New York.
 (1996). Rationality Redeemed? Further Dialogues on an Educational Ideal. Routledge,
 London.
- Siegel, H. (1996). Rationality Redeemed. Routledge, New York.
- Shor, I. (1992). Empowering Education: Critical Teaching for Social Change. Univ. of Chicago, Chicago.
- Shor, I. And Freire, P. (1987). A Pedagogy for Liberation. Dialogues on Transforming Education. Bergin & Harvey, Massachusetts.
- Spaul, M. (1993). <u>Critical Systems Thinking, Post-Modernism and the Philosophy of Richard Rorty</u>. In F. Stowell, D. West, and J. Howell (eds.), *Systems Science: Addressing Global Issues*. Plenum, New York.
- Tarski, A. (1956). The Concept of Truth in Formalized Languages. In Logic, Semantics, Metamathematics. Clarendon, Oxford, 152-278.
- Taylor, P. (1993). The Texts of Paulo Freire. Open University, Birmingham
- Thomas, S. (1973). Practical Reasoning in Natural Language. Prentice Hall, 3rd edition, 1986.
- Toulmin, S. (1958). The Uses of Argument. Cambridge University, Cambridge.
- Toulmin, S., Rieke, R., and Janik, A. (1984). *An Introduction to Reasoning* (2nd edition). Macmillan, New York. 1st edition, 1979.
- Tsoukas, H. (1993). <u>The Road to Emancipation is Through Organizational Development:</u>

 <u>A Critical Evaluation of Total Systems Intervention</u>. In *Systems Practice*, vol.6, no.1, 53-70.
- Turnbull, S. (1998). <u>Dealing with Feeling: Why Girl Number Twenty Still Doesn't Answer</u>.
 In D. Buckingham (ed.), *Teaching Popular Culture*. Beyond Radical Pedagogy. UCL,
 London, 88-106.
- Ulrich, W. (1983). Critical Heuristics of Social Planning: A New Approach to Practical Philosophy. Wiley, Chichester.
- (1987). <u>Critical Heuristics of Social Systems Design</u>. In R. Flood and M. Jackson (eds.), *Critical Systems Thinking: Directed Readings*. Wiley, Chichester, 103-115, 1991.
- (1998). Systems Thinking as if People Mattered: Critical Systems Thinking for Citizens and Managers. Working paper number 23. Lincoln School of Management, University of Lincolnshire and Humberside.
- (2000a). <u>Critically Systemic Discourse: Emancipation and the Public Sphere</u>. Working Paper number. 41. Faculty of Business and Management, University of Lincolnshire

- & Humberside.
- —— (2000b). <u>Reflective Practice in the Civil Society: The Contribution of Critically Systemic Thinking</u>. In *Reflective Practice*, vol.1, no.2, 247-268.
- Usher, R. and Edwards, R. (1994). Postmodernism and Education. Routledge, London.
- Van Eemeren, F., and Grootendorst, R. (1984). Speech Acts in Argumentative Discussions: A

 Theoretical Model for the Analysis of Discussions Directed Towards Solving Conflicts of Opinion.

 Mouton de Gruyter.
- —— (1992). Argumentation, Communication, and Fallacies: A Pragma-Dialectical Perspective. Lawrence Erlbaum, Mahwah (USA).
- Van Eemeren, F., Grootendorst, R., Snoeck Henkemans, F., et al. (1996). Fundamentals of Argumentation Theory: A Handbook of Historical Backgrounds and Contemporary Developments. Lawrence Erlbaum, Mahwah (USA).
- Vickers, G. (1970). Freedom in a Rocking Boat. Penguin, Harmondsworth.
- von Foerster, H. (1984). Observing Systems. Intersystems, California.
- Walkerdine, V. (1992). <u>Progressive Pedagogy and Political Struggle</u>. In C. Luke and J. Gore (eds.), *Feminisms and Critical Pedagogy*. Routledge, London, 15-24.
- Walters, K. (ed.) (1994). Re-Thinking Reason. New Perspectives in Critical Thinking. State University of New York, Albany.
- Walton, D. (1989). *Informal Logic: A Handbook for Critical Argumentation*. Cambridge University, Cambridge.
- Weiler, K. (1996). Myths of Paulo Freire. In Educational Theory, vol.46, no.3, 353-371.
- Wheary, J., and Ennis, R. (1995). <u>Gender Bias in Critical Thinking: Continuing the Dialogue</u>. In *Educational Theory*, vol.45, no.2, 221-222.
- White, L. (1994). Let's Syntegrate. In OR Insight, vol.7, 13.
- Whorf, B. (1956). The Punctual and Segmentative Aspects of Verbs in Hopi. In Language, Thought and Reality: Selected Writings of Benjamin Lee Whorf. The Technology of MIT, Cambridge.
- Willard, C. (1983). Argumentation and the Social Grounds of Knowledge. University of Alabama.
- Williams, M. (1999). <u>Meaning and Deflationary Truth</u>. In *Journal of Philosophy*, vol.96, no.11, 545-564.
- Willmott, H. (1989). <u>OR as a Problem Situation: From Soft Systems Methodology to Critical Science</u>. In M. Jackson, P. Keys, and S. Cropper (eds.), *Operational Research and the Social Sciences*. Plenum, New York.
- Wilson, N. (1959). Substances Without Substrata. In Review of Metaphysics, vol.12.

- Wittgenstein, L. (1953). Philosophical Investigations. Blackwell, Oxford.
- Woods, J. And Walton, D. (1989). Fallacies: Selected Papers, 1972-1982. Foris, Dordrecht/Providence.
- Young, R. (1990). A Critical Theory of Education. Habermas and our Children's Future. Teachers College, New York.
- —— (1992). Critical Theory and Classroom Talk. Multilingual Matters, Clevedon.