THE SEARCH FOR KNOWLEDGE: FROM DESIRE TO DEFENCE

Hypothesis for the Introduction of a Peirceish Interpretation of the Genetic Principle of the Process of Knowing as a Fundamental Orientation for a Future Gnoseology

Luciano Floridi

Ph.D. (Philosophy)
Department of Philosophy
University of Warwick
Academic Year 1989/90

3] With only my mind
to protect me
I go into days [...]
I think because
my brain does it.
I want bad ideas to stay
in the mind to make
pleasure without harm.

5] I keep him [death] there with
the pressure of my mind [...]
I keep my brain on so
I do not fall into nothing [...].

6] [...] I am afraid to stay
on the earth [...].
Facts stay in our mind
until they run it.*

PREFACE

The aim of the thesis is to defend the hypothesis that an anti-Aristotelian interpretation of the genesis of the process of knowing provides an interesting and fruitful means to understand the human never-ending search for knowledge and to answer doubts concerning the reliability of human knowledge of external reality. Such statement requires an explanation.

Three years ago I setted about developing a more general hypothesis that underlies this thesis, namely that *human knowledge is a reaction against reality*. What I had in mind at that time was more a group of analogies or images than a proper theory. My essential aim was investigating the possibility of shifting the starting point of the process of knowing from man to reality. I wanted to see if the hypothesis could be justified that man is constrained by reality to acquire intellectual knowledge. I wanted to argue that if it wasn't for an external pressure man would not pursue intellectual knowledge just for its own sake. According to this hypothesis man would be happy not to be involved in any process of knowing at all if this could be avoided. It is only a sort of inertial process that forces him to keep the process of knowing always open. The process of knowing is not due to an inborn natural desire for knowledge for its own sake, but to a homeostatic reaction. I had the vague idea that human knowledge, in what it differs from animal knowledge, could be a way of defending, more and more earnestly, the internal world, build up by the mind, from the external attaks conducted by reality. By developping this hypothesis I meant to open a valid path through which I could approach old problems in Epistemology. Indeed I thought that some of the solutions provided in Epistemology had been influenced by the Kantian exclusion of "why does man search for knowledge ?" from the list of the foundamental

questions to be answered by Epistemology: "do we know something ?", and if so, "what do we know ?" and, for Kant, most important of them all "how do we know something ?".

Assuming that the process of knowing is a kind of relation between a human being and external reality, I begun to articulate and support the general hypothesis about *knowledge as a reaction* by investigating the question whether it was possible to analyze the nature of such a relation within Epistemology alone, or it was necessary to shift into a theoretical analysis carried on by Philosopphy of Language. It seemed that because of the revival of the realism debate in Philosophy of Language and in Logic one could not take for granted that the nature of the process of knowing as a relation were essentially epistemological. My doctoral thesis for Rome University[1] was a defence of the pure epistemological nature of some aspects of the realism-debate, in contrast to Dummett's approach. Among the aspects belonging to an Epistemological investigation I recognized the nature of the epistemic relation occurring between a Human Knowing Subject and External Reality.

After that work, I was ready to approach the second stage of the metatheoretical development of the hypothesis: whether, and if so, why the discussion of the genesis of the epistemic relation occurring between a Human Knowing Subject and External Reality is a vital issue of Epistemological Studies. In the M.Phil. thesis[2] I argued that the genesis of the process of knowing should require a special attention within Epistemology because of the nature of the *Cartesian circle*. In that work I supported the hypothesis that a solution of this latter challenge, due to the dangerous circularity between extension and criteria of knowledge, is made possible by an appeal to a partially metaphysical interpretation of

1) *Theoretical Options and Presuppositions of the Philosophical Analysis of M. Dummett*, tesi di laurea in Filosofia a.a. 87/88, Universita' di Roma, "La Sapienza".
2) *The Need for Gnoseology - Hypothesis for the Introduction of a Theory of the Genesis of the Process of Knowing as a Fundamental Branch of Philosophy of Knowledge*, M.Phil. thesis, a.y. 88/89, University of Warwick.

the genesis of the process of knowing. I labelled the branch of Epistemology that should develop this kind of investigation "Gnoseology".

After having defended both the non-linguistic and then the epistemologically vital nature of Gnoseology, the time had come to deal with the last metatheoretical issue of my project. The new problem was that even if (i) the epistemic relation between a Human Knowing Subject and External Reality has to be investigated by Epistemology; and even if (ii) in the Epistemological Studies the genesis of the process of knowing is a vital issue studied by Gnoseology, yet this does not imply that (iii) the genesis of the process of knowing has to be interpreted in terms of a *defensive reaction*. On the contrary, the "Gnoseological" tradition provides us with a classic answer: the genesis of the process of knowing is due to the human, *natural desire for knowledge for its own sake*. In this third thesis I investigate and defend the possibility of a substitution of such a "classic" interpretation with a more *pragmatic* one.

This is the story of the origin of this work. Although the thesis, as an academic product, does not presuppose any knowledge of the previous works, I hope the reader will keep in mind the wider project of research of which it is a part.

A detailed summary of the contents is provided in the following introduction. Here I shall limit myself to specify that in order to support the value of my hypothesis, I've decided to follow the same procedure adopted in the M.Phil. thesis. I've approached the issue by focusing on a crucial problem in epistemology: *the reliability of human knowledge in presenting a faithful picture of the world*. I believe that what I shall call the "Aristotelian Postulate" - the idea that man has an inborn spontaneous tendency towards the acquisition of intellectual knowledge just for its own sake - plays a fundamental role in the formulation of that problem. Thus I belive that a discussion of the same problem brings to

light all the fruitfulness of an alternative "postulate" which could not give rise to the same problem.

The limit of this work will soon be clear. As a third part of a larger project of research, this thesis accomplishes only one task, that of supporting the importance and fruitfulness of an anti-Aristotelian foundation for a future Gnoseology. It has not been my intention to give a full articulation of its implications. And although in the last chapter I have introduced some tentative remarks that go in the direction of such an explication, I shall be contented here to recommend the whole approach, and to leave its full development to a future stage of the investigation. All I've been arguing for is the highly interesting value of the hypothesis that "intellectual knowledge is a reaction against reality". Having said this, I must also specify that with this work the metatheoretical part of the project is concluded.

Turning from the contents to the formal aspects of the thesis, two points require some further remarks, the method and the style of the work. The methodological approach I've adopted is partially analitic and partially historical. I've tried to anchor the logical formulations of my conclusions to scholarly justified bases. Aristotle is the case where this "methodology" is more obvious. As the work develops, it will become clear that in respect to Aristotle the thesis proceeds between, hence tries to avoid the two extreme lines of a *purely logical approach*, that would use Aristotle almost as a *merely polemical* label for a certain philosophical position, and a *scholarly interpretation* of his thought. I fear that to the eyes of a scholar and a historician my "analytic" use of the history of philosophy may appear too much unscrupolous; and that to the eyes of an analytic philosopher it may seem that I loose myself in the discussion of historical details which are not relevant to the epistemological nature of the issue. I can only hope that one and the other may come to appreciate the other side of the coin, namely the importance of being "analytically

minded" in the history of philosophy, and of being "historically grounded" in the analysis of theoretical issues.

About the style, I have two more things to say. In writing this work I've been struggling to keep it within the academic limit of 100.000 words. In order to achieve this goal I've been forced to rely partially on the footnotes, where many issues that could not be pursued in the text are at least sketched. But I'm also aware that sometimes I had to stop pursuing a certain thought any further. The reader may feel that this happens precisely when it would be extremely interesting to consider additional development of certain ideas. I apologize, and I can only promise that in a larger work this won't happen so often.

The reader may also notice that the thesis looks like a mosaic that comes out of many little tesserae. Precision and minute analysis is one of the properties that characterize Analytitc Philosophy and that I've tried to apply. Whenever there has been an alternative between readability and precision of formulation, I've always opted in favour of the latter. This is the place to ask the reader for some good will, and a bit of an effort in following the less plain passages present in the text. Some of them may also be due to the fact that English is not my first language. I've tried to give a help to reader by listing the technical expressions that recur more frequently in the first Appendix.

I hope that what I've argued for in this thesis won't struck the reader as completely new. As Shelling says, truth is the only thing men don't like to be the only owners, and I'm not an exception. On the contrary, I believe that good ideas live in more than one mind. And about being original, some time ago I discovered that Cicero, Thomas Aquinas and Descartes all agreed on the fact that "there is nothing strange enough that has not been already said by a philosopher". If this is true, then complete originality is something we cannot look for in philosophy. So I would be

very happy if Peirce's remark could apply to the present work: "if there is any novelty in the suggestion I am about to make - and I must confess I fear there is - it lies only in the juxtaposition of ideas" (*Collected Papers*, 7.642).

INDEX

FIRST PART

GENERAL INTRODUCTION

In the *Metaphysics*[1], Aristotle declares that one of the chief

stages in the development of human knowledge is the fact that:

> "[...] all men begin, as we said, by wondering that things are as
> they are, as they do about selfmoving marionettes [...]".

Although the whole context makes this statement less "Cartesian"

than it may sound[2], Aristotle seems to refer to a common and crucial

doubt that very likely everybody has entertained at least once in

his/her life: "reality in itself may be completely different from what

we take it to be". The group of problems arising from this observation

can be easily identified as one of the most important, if not simply *the*

issue that is at the origin of a theory of knowledge.

In order to *formulate the content* of this *prima facie Traumatic

Doubt* (henceforth also TD) with a good disposition to understand it, it

is sufficient to invoke a *generically positive perspective about the

independent nature of external reality* and a *generically negative

perspective about the nature of human knowledge*. Roughly, in order to be

able to entertain the Traumatic Doubt it is sufficient to hold that

there is an external reality whose intrinsic properties are independent

of my knowledge of it (ontological commitment), and that my knowledge is

such that I'm not equipped to grasp the intrinsic nature of external

reality (epistemological commitment). All this is very well as far as

the *content* of TD is concerned. But in order to understand that general

Doubt *as Traumatic*, and as being a *disturbing dilemma* for a human

knowing subject (henceforth also HKS), the connection between the

---

1) *Met.* I,I, 983[a]13-15. Classic text are quoted by title, more recent work are quoted by
date of edition.
2) See VI.5.a for a commentary of this passage.

ontological and epistemological components is not sufficient. A further assumption is necessary, namely that a human knowing subject wants or would like to know what reality in itself is or is not, or would not be satisfied by or happy with a knowledge of reality as this *merely appears*. This further component is strictly connected to another Aristotelian *dictum*, the famous *incipit* of the *Metaphysics*:

"All men by nature desire to know"[3].

For reasons that I will make fully clear only in the third chapter, I shall simply call this third component of the Traumatic Doubt "the Aristotelian Postulate" (henceforth also AP)[4].

As soon as we advance a bit further in the understanding of the Aristotelian Postulate, its theoretical value turns out to be noteworthy. Let me explain the point.

As I said, the observation that reality in itself might be far from what we believe it is, is one which possibly everybody has casually made at least once in his or her life. It is also such that just a few persons have been really curious to investigate seriously and at length. Indeed, we may recognize someone as a philosopher (or as someone who has some philosophical interests) by checking the quantity of time he or she might be ready to spend in thinking seriously about the possibility opened by that observation. In fact, the Traumatic Doubt seems to be extremely annoying in different senses.

Superficially, it seems to be a mere speculative fantasy of a tired mind. And in this sense the doubt is immediately dismissed by the great majority of people as a nonsense. The doubt is annoying because there seem to be better ways of employing our time and mental energies than by entertaining similar fancies. This reaction doesn't lead us too

---

3) *Met.* I.I, 908^a 21-7.
4) For a definition of the AP see D_{27} in IV.6.c. For an analysis of the Aristotelian *dictum* see chap. IV.

far and according to it there wouldn't be any need to write work like the present. I shall therefore dismiss it without further reason.

Philosophically, the thought is disturbing (the Doubt is Traumatic) because it seems to bring with it a rather unpleasant impression of displacement: it seems that if external reality in itself may be completely different from the way we think it is, we are all prisoners of our mental world, in a *more or less individual form of ontological solipsism*[5]. Or, to put it in another way, the Doubt presents ourselves as potential strangers to the world: we could be living our epistemic life on the border of it, outside its intrinsic nature, the "real" reality lying beyond the wall of our mind, and as such remaining forever unreachable. From the philosophical perspective, or simply according to the Aristotelian Postulate, it follows that the thought is *apparently* disturbing because we would be *spontaneously* interested in *knowing* what the nature of external reality is, what happens around us, and the thought, if there should be some truth in it, is traumatic because it would frustrate this innate desire. The *displacement* inherent the idea of an unknowable reality is a *mental* displacement. It acquires its full traumatic impact on the account of the fact that, though we live in the world as beings among other beings, we cannot know the intrinsic nature of what we live in contact with, of what we eat, of what we enjoy, of what we fear. Shortly, the Traumatic Doubt leads to the unpleasant conclusion that we don't and cannot know the real nature of the world where we live, and this despite the brute fact that we live in it. This is the philosophical picture, grounded on the Aristotelian Postulate, that we receive from the tradition.

---

5) 'Solipsism' is generally used to refer to the state of a mind which has not the possibility of entering in contact with other minds, whereas in this case it indicates the state of exclusion of a mind from the ontological intrinsic nature of external reality. This is why it can be more or less 'individual', depending on whether or not we endorse also a version of solipsism of the first type.

Now there might be different responses to the Traumatic Doubt. If I were to put mine bluntly, I would say that I don't believe we really mind about leaving reality out of our business. On the contrary, I believe that "human kind cannot bear very much reality"[6], and this in a sense that will be clarified only in the last chapter. There, I shall also make clear what makes my position different from the "superficial" one dismissed above. The hypothesis I will advocate is that it may be all for the best that reality in itself should remain uncovered to human beings. But there will be time in the future to support and specify these theses. At the moment, and all through the first part of this study, let me interpret the doubt that "reality might be completely different from what we take it to be" as "disturbing" in a face-value sense of the term: we shall presuppose that man does not like this possibility and eventually he would like things to be otherwise, i.e. man would like to be (at least potentially) truly in full contact with external reality.

An important feature of the Doubt is in need of a clarification. I suspect it is quite natural, once the Traumatic Doubt has crossed our minds, to associate it with the loss of faith in a naive picture of the world caused by scientific discoveries. Seemingly, science, in a broad sense of the term, has put significant weight in favour of the Traumatic Doubt that reality in itself is in fact different from the ordinary picture we have of it. And yet this is not what I suppose we really have in mind when we consider the disturbing thought radically enough (which probably means philosophically enough). For as long as it is *human science* which is discovering some other portion of reality we didn't already know, then we are still confident to be able to grasp the final nature of it. For example even if we don't yet know of the underlyining nature of matter or its physical laws, we are still confident that there

---

6) T.S.Eliot 'Burnt Norton' in *Four Quartets* ([1978], p.172.

is someone else who knows or who will be able to know in the future. This certainty has never been stronger than nowadays, despite the fact that scientists admit that we probably don't understand the intrinsic nature of reality much better than we did centuries ago. All this is to say that, though scientific discoveries, from Copernicus to Einstein (but think also about those concerning the nature of man, from Darwin to Freud) might be the first origin of the Traumatic Doubt, nevertheless they are still far from representing the real issue. For when we think that external reality might be different from what we take it to be, we may be referring to a very radical possibility: that human knowledge of the intrinsic properties of external reality could be *constitutionally* impossible, not just merely limited or partial or in need of development.

It is mainly in these terms that the problem is a classic philosophical issue. In fact, the epistemological turn that we generally locate in Cartesian thought as the beginning of modern philosophy can be interpreted as revolving precisely upon this dilemma, whether or not we can come to discover the "real" nature of external reality, if it is not just a dream, or a devil joke.[7]

By characterizing the Traumatic Doubt in such broad terms as one of the central problems in epistemology, I mean to explain why an exhaustive study of it and of its attempted solutions would be too ambitious a task in this work, a task which certainly goes beyond my capacities, and which is also not my interest to achieve in this context. Here I shall be rather concerned only with a particular aspect of the whole dilemma, namely its anthropological component, which I've called the Aristotelian Postulate. And this only from a limited perspective, the task of introducing an anti-Aristotelian Postulate. All this can be summarized in very crude terms by saying that, among all the

---

7) The radical separation between Knowing Subject and Known Object is the other side of the issue. cf. Cassirer [1963].

available solutions of the Traumatic Doubt, I believe it may be interesting and productive to try the classic manoeuvre of dissolving the problem *qua* problem. In order to do so the possibility described by the disturbing thought might be taken seriously, but it should be rejected in its negative connotation, as being really disturbing in the sense above specified. If man is not interested in knowing the intrinsic nature of external reality then there is no reason to believe that a "phenomenal" knowledge of external reality is any worse than a "noumenal" one. Likewise, if the wall of our mind is not like that of a prison but like that of a castle than all the foregoing metaphors about "human displacement" ought to be reverted. And going a bit further, if man is interested in leaving reality outside the internal world of his mind as much as this is reasonably possible, then the presence of a gap between noumena and phenomena should be welcome rather than feared.

Of course all this cannot be matter of stipulation: we either recognize man as spontaneously interested in knowing just for the sake of knowledge or we don't, and we don't simply decide whether he is or is not. But surely a very quick investigation may already shift the weight of the proof on the Aristotelian side. I don't really see the majority of people pursuing knowledge for its own sake as Aristotle seemed to. Although I recognize that this is a very unfair way of contradicting Aristotle, it gives a *first* idea of what my purose is. Of course the issue is far more complex than can be merely sketched here, and certainly the key issue is not merely statistical. Indeed, the whole thesis is an attempt to make sense of the *philosophical* possibility of an anti-Aristotelian vision of man's interest in knowledge for the sake of his own *peace of mind*. As will be clear at the end of the second part, I won't even try to sketch what theory of knowledge could emerge from this shift. I will feel already satisfied if, within the limits of

this work, I'm successful in supporting the value of such a theoretical proposal.

Turning now to the way in which I have dealt with the issue, the present work is divided into two parts.

The three chapters that make up the first part represent the three phases through which I will introduce the discussion of the theoretical value of the AP. Therefore, they deal only with the epistemological and ontological components of the dilemma. What I intend to do in these three chapters is to show how it is possible to arrive at the formulation of the Traumatic Doubt (chapters I and II) and to describe what solutions have been already attempted (chapter III). In the second part I shall adopt the strategy of objecting the whole interpretation of the problem qua problem by adopting an anthropological point of view opposite to the Aristotelian.

On the whole, I've adopted an oscillatory exposition (see scheme.1 below):

- in chapter I, first I state the issue about the meaning of the realism and anti-realism debate from a very general perspective (I.1-2); then I proceed towards a distinction between, and clarification of ontological realism and epistemological realism (I.3), hence advancing from the exposition of the former (I.4) to the exposition of the latter (I.5);

- in chapter II, I rejoin the two forms of realism together in a mutually supporting connection (what I've called "Ingenuous Realism", see II.1-2). Assuming the breakdown of this global approach, I distinguish the two perspectives once more, this time on a negative basis, and by proceeding from the exposition of a refined version of epistemological anti-realism (II.3) to the exposition of a refined version of minimal ontological realism (II.4-5). The whole process leads to the last section (II.6) where finally I summarize the conclusions of the foregoing analysis by spelling out the significance of the dilemma

expressed by the Doubt that "reality may be different from what we take it to be". In that section I shall label the whole problem implicit in the Traumatic Doubt "the Perpetual Check of Reason".

The detailed analysis carried on in the first two chapters is important not only for the sake of a clear understanding of the problem, but also in order to render explicit the essential steps made in the process of its formulation. For in this way I will be able to sketch,

in chapter III, all the main solutions that have been proposed to the Traumatic Doubt, as consisting in essential objections to the nature, or alternative approaches to the value of each of those steps. In other words, the third chapter unravels, as a pars destruens, the main operations carried out in the first two chapters, the pars costruens, in order to see what has been left implicit in the formulation of the Perpetual Check of Reason, and therefore what has been left untried in avoiding its final formulation. Still following the oscillation between the ontological and the epistemological component, I first focus on the so-called metaphysical strategies and then on the epistemological. The chapter ends with the introduction of a third kind of strategy, those presenting the possibility of a revaluation of the gap between the world as it is in itself and as we know it. This will introduce the second part of the work. By that time I should have succeeded in showing that the abandonment of the AP is both a negletted and a potentially fruitful source of solutions of the dilemma.

The first part of the thesis can be schematically presented thus:

THE PATTERN OF THE INVESTIGATION.1
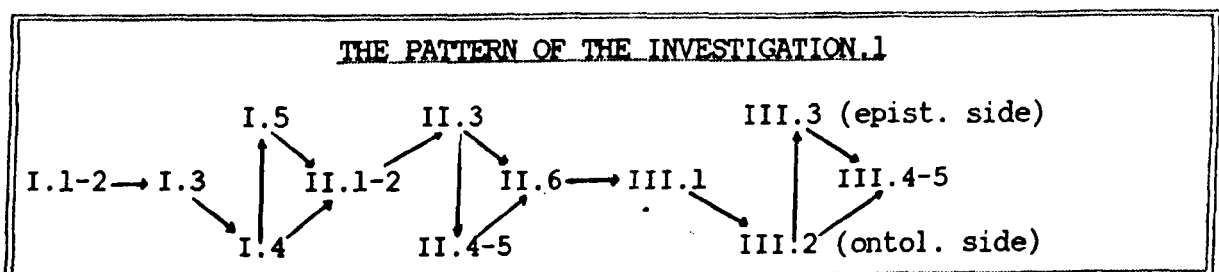
scheme 1

Summarizing, the fundamental hypotheses supported throughout this scheme are:

- one of the central problems of epistemology is the Traumatic Doubt according to which reality might be different from what we take it to be;

- the formulation of this problem implies an epistemological, an ontological and an anthropological component;

- many solutions have been attempted to avoid its formulation with its consequences, but the anthropological side has been largely disregarded. The main reason for this is that most of the time the AP has been *implicitly* accepted by the majority of the strategies. The AP is the common background of many different approaches to the problem; from what it follows that

- first, a solution of the Perpetual Check of Reason working on its anthropological component deserves at least as much attention as the other two components, and

- secondly, this goal may be fruitfully pursued by replacing the AP with an Anti-Aristotelian Postulate.

The second part can be read as a more detailed development of what otherwise would amount to a section of the third chapter, that is of the anthropological strategy:

- in chapter IV, I discuss the nature of the Aristotelian Postulate. First I analyse Aristotle's statement from a scholarly (IV.2) and from a historical point of view (IV.3-5); then I produce a logical definition of it (IV.6); and finally I outline the consequent vision of man, that endorsed by the acceptance of the AP (IV.7);

- in chapter V, I sketch a summary of the reasons that may be at work in the acceptance of the AP. First, I give a brief map of them (V.2); then I focus more in detail on the *abductive reason* for the AP, which is the

most interesting of the *epistemological* arguments (V.3);, the *metaphysical* arguments are summarized and discussed all together (V.4); and the two trends are joined in the consideration of what I've called *Boethius'* paradox (V.5). The last reason for the AP considered is *analogical*, for it consists in a comparison of the process of knowing to that of motion (V.6-7). The conclusion of the chapter is that despite its deep historical roots there are no really convincing reasons to assume the theoretical validity of the AP;

- in chapter VI, the longest of the thesis, I formulate a *Peirceish*[8] alternative to the AP for the interpretation of the principle of the genesis of the process of knowing. I start by dismissing a trivial version of the anthropological strategy. Its discussion makes clear how an anthropological strategy must be addressed if it wants to be effective (VI.2). Resuming the discussion of the nature of the principle of the genesis of the process of knowing from the analogical side, I then briefly remark on the physical interpretation of the law of inertia, referring to Ockam, Buridan and Newton (VI.3). This will lead to the assessment of a more philosophical understanding of the same topic in Spinoza. In that section I try to bring to light the importance of a *static and inertial* picture of the natural tendency of human mind, and then to formulate a first version of what I shall call "the Peirceish Postulate" (VI.4). In the following two sections I point to some historical references (VI.5) and to some aspects of Peirce's philosophy (VI.6) in order to provide the Peirceish Postulate with a broader epistemological basis. As I said earlier, I don't pretend this to be a development of a Peirceish Epistemology, and the remarks put forward there are to be understood as a mere sketch of a general orientation, not as a fully articulated theory. The anthropological

---

8) This adjective was introduced by Sellars in [1968], p.140, instead of 'Peircean', in order to mean 'Peircean-like' (cf. Fisch [1986], pp.429-42, especially p. 435). For a justification of its use in this work see VI.6.

strategy grounded on the Peirceish Postulate is tested in the last section (VI.7), where I attempt to show that, according to such an anti-Aristotelian Postulate, the Doubt is no longer Traumatic, and the Perpetual Check of Reason is no longer a negative phenomenon. The Open Conclusion introduces some of the principal questions that a future work accepting the Peirceish Postulate should try to answer (VI.8).

There are two final Appendices, one listing the definitions and abbreviations used in the work, the other focusing on some aspects of Peirce's thought whose discussion could not be inserted in the final chapter.

The second part can be schematically presented thus (where p stays for "perspective"):

THE PATTERN OF THE INVESTIGATION.2

```
        (histor.p. )              (metaphys.p.)
           IV.3/5                      V.4
IV.1               IV.6/7 ———→ V.1/2    V.5 ——→V.6/7 — — — →
                                                (analogical p.)
           IV.2                        V.3
      (scholarly p.)              (epist.p.)
```

scheme 2

THE PATTERN OF THE INVESTIGATION.3

```
                    (philos.p.)
                      VI.4
— → V.6/7 ————→ VI.1/2      VI.5/6 ——→ VI.7 —→ VI.8
(analogical p.)               (epist.p.)
                    VI.3
                                      (scientific p.)
```
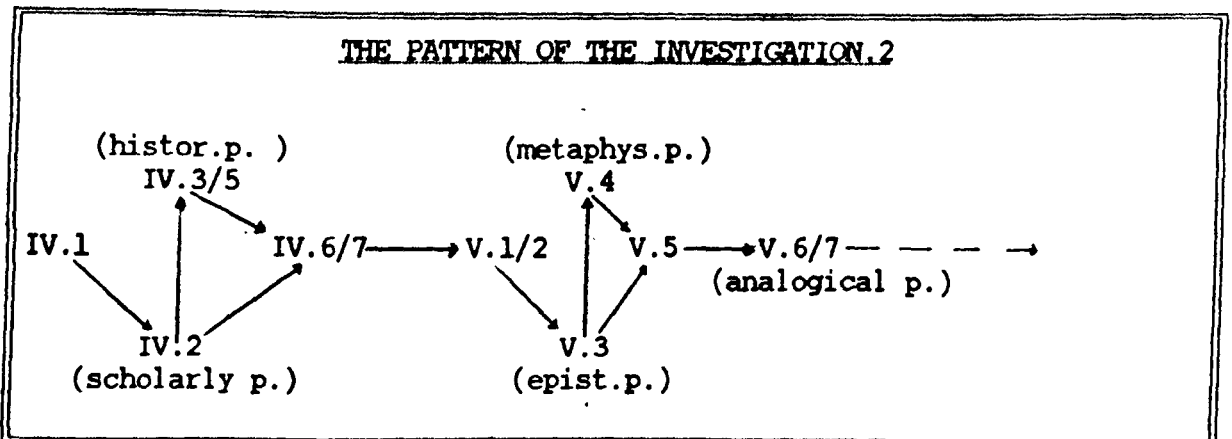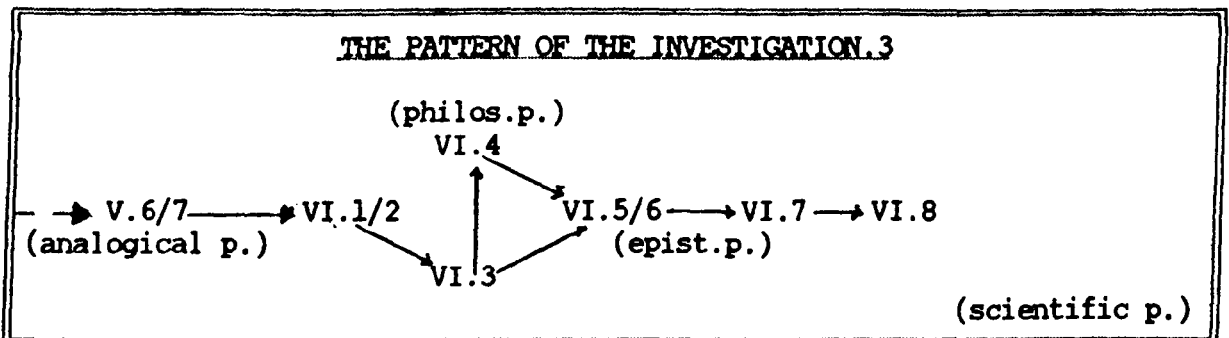
scheme 3

Summarizing, the fundamental hypotheses supported throughout scheme 2/3 are:

- one of the main assumption in the theory of knowledge is the idea that man has an inborn and spontaneous tendency towards the acquisition of intellectual knowledge for its own sake (the AP);

- the AP, although largely accepted, does not have any strong ground of justification, apart from various metaphysical hypotheses;

- since one of the more interesting reasons to accept the AP is the analogy between knowing and moving;

- then the possibility of elaborating an anti-Aristotelian Postulate can be introduced by working on the same dynamic analogy;

- this can be done by shifting from a dynamic to a static and inertial interpretation of the natural tendency of human mind;

- such a static and inertial interpretation allows an understanding of the process of knowing as a process of defence, activated by the human mind in order to cope with reality and keep it outside her internal world; more metaphorically, the limits of human knowledge, previously interpreted as the walls of a "prison" become those of a "castle";

- this Peirceish approach implies the possibility of solving the Traumatic Doubt qua Traumatic.

At conclusion of this foreword two more comments must be added on the way I proceeded in introducing the discussion of the AP.

First, the idea of elaborating a more rigourous formulation of the position for which reality in itself is unknowable, and therefore the idea of reinterpreting different epistemologies as attempts to solve this problem is *purely theoretical*. I couldn't be farer from believing to have presented a scholarly interpretation of the authors mentioned in chapter two and, above all, in chapter three. For this aspect the second part is not better. All this doesn't mean, however, that what I said there has no connection at all with the real status of the theories I'm referring to. It is just that I'm considering more important the

theories than their owners, and I'm treating these latter not historically, but somehow as all sitting around the same table, facing the same problem lying in the centre. They speak to each other and it is necessary to aknowledge who speaks to whom, but that is probably the most which can be scholarly obtained from my approach. To give an example: I shall consider Berkley as giving an answer to a problem that I previously define Kantian. But by this I mean to say that on one hand the problem in question can be formulated in its clearest features from a Kantian perspective, and that on the other hand Berkley was not dealing with a different issue, but that his solution is one of the possible solutions that can be listed in front of the problem. Whenever possible I have made this limit explicit in the text.

Secondly, despite the fact that I'm very sympathetic to a Kantian approach to the unknowability of the intrinsic nature of external reality, and despite the fact that I shall use a Kantian formulation of this problem in order to introduce other epistemologies in chapter three, chapters one and two should not be taken as attempting a defence of Kant's position. Their nature, as will be obvious in a moment, is highly stipulative, and their target is merely that of making explicit the essential steps necessary to understand how we can come to formulate a Kantian version of the dilemma about the unknowability of external reality. I need this exposition in order to make clear how each step can be objected. And the first two chapters would be too easily criticisable if they were to be taken as also supporting what they are merely outlining.

CHAPTER I

REALISM AND ANTI-REALISM: A GENERAL FRAMEWORK

"For all knowledge and wonder (which is the seed of knowledge) is an
impression of pleasure in itself."
Francis Bacon, *Advancement of Learning*, I,i,3.

I.1 INTRODUCTION

In order to entertain the Doubt that "reality may be completely
different from what we take it to be" with some seriousness, one needs to
entertain at the same time and with the same degree of urgency two separate
theses: one *ontological* and *positive* and the other *epistemological* and
negative. But having said this, one should not be tempted to identify the
two components too readily. In fact they are rather difficult to
disentangled. What is needed is a careful and detailed examination, without
which the whole Doubt will be just inarticulated, more like a piece of *pure
metal* than an *alloy*. This is why in this chapter I wish to provide the
"blast furnace" where the "Doubt-alloy" is going to be decomposed into its
components. In order to present the TD as due to the combination of an
ontological and an epistemological thesis, a theoretical level must be
found where the ontological thesis can be really joined with the
epistemological thesis. Such a theoretical common level must be not only
terminological but above all *conceptual*.

The *realism-debate* represents the common basis on which the two
theses can be so formulated as to make them interlock in the constitution
of the theoretical content of the TD. Unfortunately, precisely because the
realism-debate is in fact such a common ground of confrontation for
epistemological and ontological positions, it is also rather crowded. In
order to make room for the merging of the two specific theses it will be

necessary to clear up a certain area of it. In so doing I shall adapt the realism/anti-realism epistemological terminology to the realism/anti-realism ontological terminology (this point is made clear below). I shall proceed gradually, by making some general remarks increasingly more specific.

I.2 DISTINCTIONES RATIONIS

Theoretical distinctions play a *fundamental role* in human knowledge and in that specific field of it that is philosophy[1]. Once we are able to conceive a theoretical scheme, a conceptual organization or more simply some sort of pigeonhole system by means of which we distinguish and order our thoughts, we generally feel that a good part of the mental work knowledge or understanding consist of has been already done[2].

Like any other human activity, the production of *valid* theoretical distinctions requires a certain amount of *mental effort and time*. Hence, although we may assume that they are developed and selected by a continuous process of adjustment - so that there is no theoretical distinction which may be thought to be fixed for ever, without being susceptible at least of some improvement - we must also consider that these modifications are made only when the effort is either worthwhile or necessary. We may improve a *theoretically satisfying* distinction we still feel adequate just because it is easy to do so without much effort, or we may be forced to change a

1) It is not necessary to refer to the conception of philosophy as analysis to endorse such a common view, see for example Grayling [1982], p.18. A clear discussion of the issue is given by Passmore [1961], last chapter, and an historical example of the process is Plato's use of *dialectics* in his *Dialogues*.
2) It is possible to connect this reasonable remarks with the more controversial idea that theoretical distinctions are *conditio sine qua non* for having knowledge of something. And from this position it is also possible to go so far as to hold that we acquire new knowledge by *recognizing* new thoughts (or, in a pre-Cartesian approach, new things) as belonging to one or another of our already established theoretical distinctions. This seems to be the position of Nicolas de Cusa. A radical version of Platonism consists in reducing to a matter of recognition also the acquisition of our theoretical distinctions (the process of *recollection* of ideas).

theoretical distinction because it is by now considered completely inadequate.

Such a process of adjustment depends also upon the field of application of our theoretical distinctions and upon our chosen ends. The quality of a theoretical distinction is to be evaluated as adequate, good, valid, useful and the like according to a particular context and specific goals. Unfortunately, it is not always easy to determine the relation between two different theoretical distinctions which are appliable to the same topic or that, up to a certain extent, overlap. For sometimes such a relation can be interpreted in terms of degree of approximation – one distinction being for example less precise than the other – while sometimes we are facing just different ways of looking at the object of our investigation, which therefore are essentially incomparable.

The relation between the goodness of theoretical distinctions, efforts necessary to change them and relative contexts and goals according to which they are more or less appreciable is made more complicated by the fact that theoretical distinctions have a linguistic nature. Being part of our language, they show a historically determined nature. They may change according to fashions or become more or less popular, and all this according to external factors not necessarily relevant to their epistemological value. If it is easier to abolish a no longer useful theoretical distinction than to modify one which is only a bit too gross, this is so also because the theoretical distinction has been used for a more or less long time within a linguistic community that will passively "resist" the change, especially if this doesn't appear strictly necessary. Of course, it is always possible to modify our theoretical distinctions. It is just that any change is slowed down by the nature of language itself and only rarely one person has the power to move such an enormous body of passive conventions. This is one of the principal reasons why appeals to philological meaning by an author can hardly change the use of a key word

which has taken some distance from its ancient roots. In speaking of changes of our linguistic theoretical distinctions it is a good attitude to remember that we are never working in laboratory conditions.

As historical items, linguistic theoretical distinctions tend to become traditional. For this reason they can also be interpreted as narrow limits constraining our thought. Their cultural history and the fact that they are not easily changeable can make them appear unshakeable points of reference, independent of our capacities of governing them. But in fact there is nothing dogmatic about them, and they can be just useful guide-lines to start with in our investigations. Philosophers, intellectuals and scientists are among those most responsible for any change or continuity in the "tradition" of our linguistic theoretical distinctions.

If the above are the general features of theoretical distinctions, it is easy to recognize how extreme - both in a positive and in a negative sense - they become in those particular kind of theoretical distinctions that are theoretical dichotomies.

In particular, theoretical dichotomies are very powerful schemes because they can be easily managed, and combined with a bivalent logic (when they are used or formulated as disjunctions) allow a quick and efficacious organization of any topic. On the other hand, their powerfulness is paid for in terms of lack of flexibility. "Form/Content", "Right/Wrong", "Superfluous/Essential", "Necessary/Contingent" are good examples of powerful but not very flexible categories whereby we organize or pilot our thoughts.

All this by way of preliminary. The previous remarks need now to be made more specific in order to introduce the particular type of theoretical dichotomy we are concerned with in this chapter, vz. the philosophical dichotomy between "realism" and "anti-realism".

I.3 A THEORETICAL DICHOTOMY: REALISM VERSUS ANTI-REALISM

According to I.2, "realism vs. anti-realism" is a philosophical dichotomy which may be supposed:

(i) to have one or more different *contexts of application* and then at least one correlated *target* for each context,

(ii) to be *linguistic, historical* and *traditional*,

(iii) to be *very powerful* in terms of interpretation but *not very flexible*.

Unfortunately, the use of the dichotomy[3] "realism/anti-realism" is even more problematic than others. Its peculiar difficulty is that its utility is limited not only by its mere character of manicheist distinction - which, according to what has been said before, is a common limit to all the dichotomies - but especially by its *lack of clear criteria of application*. The use of the two labels to indicate a philosophical position with some acceptable approximation is rarely satisfying, not just because they are too crude (we are using them precisely for that reason), but principally because we lack some precise, definite meaning for them, and hence some standard rule of application. Unless it is somehow corrected, this last feature can easily make the dichotomy "realism vs. anti-realism" totally useless. In employing similar distinctions in philosophy we may afford losing something in terms of *degree of accuracy* if and only if we really acquire something else in terms of *degree of understanding*. And since the distinction "realism vs. anti-realism" as it stands does not satisfy this condition, unless there is a way to fix its meaning it may even be better not to use it at all than to be misled by its fluctuating character.

There are good reasons, both historical and theoretical, why "realism vs. anti-realism" is not a very adequate disjunction and generally needs to

---

3) Whenever it is not misleading I shall drop the specification 'philosophical' and 'linguistic'. I may also employ the three terms 'distinction', 'dichotomy' and 'disjunction' interchangeably.

be improved by numerous further sub-distinctions, in order to gain a specific meaning. Let me give a brief summary.

a) Technical and Ordinary Sense of the Dichotomy.

Like many other items of philosophical jargon, the disjunction "realism vs. anti-realism" has a non-philosophical root in ordinary language. Some of the difficulties in its use are due to the fact that - limiting ourselves to English - we see that a person is commonly qualified as a realist, or as "showing a [great, robust and the like] sense of realism", in order to attribute to her a positive disposition, presumably the capacity of seeing, taking, or treating things as they really are (clearly in a non philosophical sense of this latter expression). For example, no politician would seriously and without any rhetorical reason define himself as an anti-realist. At most, he will use the adjective "daydreamer" or even better "utopian" as underlining his capacity of going beyond the brute reality of facts, not against it. According to such an ordinary use, there is no distinction between being realist and being realistic. The Oxford English Dictionary, for example, associates the two terms, and it doesn't have any entry for "anti-realism/realist/realistic", which means that it considers the meaning of these latter corresponding in any case to the opposite meaning of realism/realist/realistic.

Obviously, in philosophy there is no such association, and yet the dichotomy suffers from a sort of disturbing, misleading echo from our ordinary usage. When we describe a philosopher as a "realist" it is rather easy to consider it a favourable connotation, and the opposite may frequently happen with "anti-realist". We should also take care to notice that in some cases of sub-specifications of the two terms, the "disturbing echo" may be seen counterbalanced by an equal but opposite "disturbing echo" presents in other associated terms like "naive" or "critical", e.g. in "naive realism" or in "critical anti-realism" etc.

b) Indexical Value of the Dichotomy in Philosophical Self-understanding.

Partially linked to the "misleading echo" is the *indexical value* that the two terms acquire in the process of philosophical self-understanding. The sense of "being a realist/anti-realist" may change according to the point of view of the author who is using the label. Philosophers, especially metaphysicians, may conform to ordinary linguistic practice and as far as their own self-description is concerned they may tend to consider themselves realist/ic, despite how others label them. Consequently, as far as other thinkers are concerned, the same philosophers will label them anti-realist/ic. This is so for quite an obvious reason. If, in very crude terms, the philosopher's target can be said that of coming to deal with what is the real nature of a certain topic, then he will simply refuse to consider his work as anti-realist/ic; he will refuse to admitt that his work does not see, take, or treat a certain topic as it *really* is. On the contrary, he will consider his work as closer than any other to such a target.

c) Traditional Meanings of the Dichotomy in the History of Philosophy.

Despite (a) and (b), the dichotomy "realism vs.anti-realism" has been used for so long in the history of philosophy that nowadays we have inherited some philosophical positions which traditionally go under the labels "realism" or "anti-realism". However, instead of simplifying the matter, these few, traditional understandings can make things worse. What may happen is that once some philosophical positions are more or less uncontroversially recognized as traditional cases of realism or anti-realism, say for example *Platonism* vs. *Nominalism*, then some other philosophical positions can be defined on the basis of these positions either *by opposition* or *by analogy*, but in many cases *independently* from each other. In this way a certain philosophical position may be labelled "realist" or "anti-realist" only in a certain respect to a traditional form

of realism or anti-realism, without taking into account what other relations there might be between its reference and other philosophical positions. For example, *Materialism* may be presented as a form of ontological realism in so far as it is opposed to *Idealism*, and yet as a form of logical anti-realism, i.e. as a form of *Nominalism*, insofar as it is opposed to *Platonism*. Obviously, the procedure gives rise to a wide range of possible sub-specifications, which contributes to make the whole distinction rather suspect.

d) Contemporary Philosophy: Philosophical Use of the Dichotomy.

Problems due to (c) are further increased once we notice that the label "anti-realism" only came to denote a proper philosophical position as the result of the debate between classical and intuitionistic logic, that took place again under the aspect of antagonist theses about the theory of meaning. In the last two decades we have seen philosophers to refer to themselves as "anti-realist"[4]. But we must remember that ancient or modern philosophers were referring to themselves e.g. as *sceptics*, *nominalist* or *idealist*, not as *anti-realist*. This leads us to the last of the major aspects of the history of the two terms, namely their *meta-philosophical* use.

e) Contemporary Philosophy: Meta-philosophical Use of the Dichotomy.

Philosophy is also its own history. For this reason philosophers have understood and still understand the meaning of "realism" and "anti-realism" by tracing this dichotomy in previous philosophers. And in so doing they

---

4) The realism-debate in its manifold aspects is a continuous line that can be followed all throughout the history of western philosophy. The actual revival may be connected with the development of the philosophical debate both in philosophy of science and in philosophy of logic and language. In the former case a key-date is certainly the year 1982 with the three issues of *Synthese* concerning the realism-debate (cf. Passmore [1985], chap.4). In the latter case Dummett's philosophical production can be adopted as a parameter. The term "anti-realism" appears in his work since Dummett [1959], but I think it has gained more of its popularity in the philosophical community only since the later seventies, after the three articles of Scruton, Wright and Strawson were published by the *Aristotelian Society* (cf. [1976], [1976] and [1976/77] respectively) and Dummett's collection of articles appeared [1978].

have contributed in confusing the matter. For meta-philosophical uses of "realism vs. anti-realism" re-interpret and re-label positions which perhaps didn't consider themselves under these terms, or perhaps were using the distinction against other positions, or perhaps were considering themselves exactly in the opposite way, according to different standards. The process of applying new standards to old positions is continuous, and produces through the centuries different traditions which again may or may not agree on certain interpretations of certain other philosophical positions. Following the contemporary debate between realism and anti-realism in the philosophy of language, the tendency has been increased of adopting "realism" and "anti-realism" also to interpret philosophical positions of the past, as if they were really dealing with the same issues we may be nowadays. The arbitrariness, together with the undeniable usefulness of such a projection may be obvious, but certainly it is not always clear whether we are aware to what extent we are forcing history into extraneous schemes.

The conclusion that can be drawn from the previous remarks is that the semantic/conceptual area covered by the linguistic dichotomy "realism vs. anti-realism" is heavily, almost totally dependent on the context of application. Many different approaches overlap and entangle, and the whole ground looks more like a battle-field than as a tidy garden. From this, however, it doesn't follow that any reference to the realism-debate is hopeless and must be necessarely abandoned. On the contrary, the manifold terminological uses and the fact that philosophers so often still come back to the realism-anti/realism dispute to move their first steps towards a better understanding of different philosophical issues shows that a reference to the two terms and to their conceptual field can be meta-theoretically very efficacious. The only proviso is that their meanings are unambiguously stated and their use regulated by some stipulative

definitions. This is the task of the next three sections. There I shall try to construct a meaning for the two terms such as to make them employable within this research, i.e. useful to delineate the terminological and conceptual common ground necessary in order to formulate the two compatible ontological and epistemological theses that make up the Traumatic Doubt.

I.4 TWO PHILOSOPHICAL AREAS OF "REALISM".

Ontology, epistemology, logic and *philosophy of language* all are concerned with "realism"[6] as a theoretical position. Yet, it can be already questioned whether there are only four philosophical disciplines concerned with "realism". In particular, even at this stage of the issue philosophers disagree on whether there are really different forms of realism for each of epistemology, logic and language or, on the contrary, discussions in one or two of those areas should be reduced to discussions in the other one or two[6]. Nowadays the tendency is to privilege philosophy of language, but Frege would probably opt for logic and Hume or Kant most likely for epistemology, whereas eventually a medieval philosopher like Albertus the Great would ask us to distinguish between logic and mathematics, in order to focus on the ontological nature of the universals.

Despite these fundamental disagreements, however, the majority of discussions about the nature of "realism" agree at least on the following basic distinction:

---

5) I shall adopt the common solution of defining (forms of) 'anti-realism' on the basis of what I understand here by (forms of) 'realism'. The full significance of this device will appear in the next chapter.
6) Other philosophers may even disagree on the reduction of the areas interested by the realism-debate to only four, perhaps wishing to add ethics, philosophy of politics, aesthetics, theology or philosophy of mind. However, while I'm not sure about the possibility of a further reduction that would not imply any important loss, I'm rather confident that any other form of philosophical realism can be correctly interpreted in terms of ontological, epistemological, linguistic or logical realism. This is an assumption I won't try to support here.

- on the one hand there are forms of realism concerning the *nature* (i.e. *existence and properties*[7]) of *things, events, facts*, i.e. *the physical world* (in an ordinary sense of "physical") or *external reality*[8], that is the debate concerning *forms of ontological realism;*

- and on the other hand there are all the other forms of realism concerning *human thoughts, knowledge, mental objects, logic* or *language* - or what we may define the *mental*[9] *world* or *internal reality* - that is forms of realism in epistemology, in logic and in philosophy of language, or at least, according to a reductionist approach, in one of these areas.

Despite its being only a first rough approximation, this basic distinction seems largelly acceptable. It can be explained and supported by the following intuitive reasons. The terms "realism" and "anti-realism" are first introduced in order to label philosophical positions concerned with what kind of *existence* a certain x enjoys, say mental, real, phenomenal, *timeless, in re, post rem* etc.. Now our *paradigm of "existence"*, our touchstone for understanding the nature of any kind of existence, is the existence of things in the world around us or like us. It would be exceedingly arduous to speak of the "existence of something" without referring back to this standard sense of "existence" we are acquainted with, i.e. that enjoyed by "what *there is* in the world"[10]. Starting from

---

7) Generally, by the term 'nature' I shall refer to both 'existence' and 'properties' or 'characteristics' or 'features' of something. I shall assume, with Kant, that 'existence' is not a property or a quality of something but a sort of modal position among possible ways of being. If 'existence' should be considered a property then clause (ii) of D_{17} in II.5 would be inconsistent. More specifically, it would be impossible to say that when we conceive the existence of an unknowable noumenal reality we are not contraddicting ourselves by determining somehow its nature, namely by attributing to it the 'property' of existence.

8) The expression 'external reality' is better explained in the following sections. Here it is used to cover the meaning of 'external things', 'things external to us' and 'things external to our minds'. As Moore ([1959], p.129) says: '[These latter] have been used as equivalent to one another, and have, each of them, been used as if they needed no explanation. The origin of this usage I do not know. It occurs already in Descartes; and since he uses the expressions as if they needed no explanation, they had presumably been used with the same meaning before.'

9) If someone should feel uneasy about the possibility of such a use of 'mental' let me specify that my use of the terms in this context doesn't imply a commitment to the presence of a 'mind' as separated or different from a 'brain'. If asked, I should probably endorse some kind of dualist position, but this is not the point in question here, and as for the dualism between thought and language, the question can be left indeterminate.

10) Cf. for example Moore [1953], chapter XII.

the assumption of this paradigm, we generally distinguish between issues concerning realist or anti-realist positions about what we meet in the physical world - things, properties, qualities, events, facts, the world itself[11] - and issues concerning realist or anti-realist positions about what at the very beginning appear at least as human mental products or events, i.e. the mental world of logic, language and knowledge. In fact, the distinction introduced above may be reduced, in very crude terms, to that between *res extensa* and *res cogitans*, or *matter* and *thought*. In the former case we start from the paradigmatic existence of the physical world and then we progress by questioning whether it is really as it appears to us and what it is in itself. In the latter case we start from a non-paradigmatic existence of human mental products or events and then we wonder whether they may enjoy also a "real" existence, and what their relation is with the external world, or whether they have any other non-mental properties.

According to I.2, we may expect realism about the physical world to assume many different aspects. And in fact we have realist positions on topics ranging from the discussion of the existence of external reality to the discussion of its logical-scientific features, from the ontological dependence of the universe on God's action to the dependence of the nature of objects and events on human mental projections and so on. Since my purpose in this chapter is producing a neat version of the realism-debate that later will allow an analysis of the TD in terms of a problematic relation between the idea of a physical world with independent existence and properties and that of human knowledge with a limited nature, for the

---

11) Cf. Moore [1959], p.129 and ff. about Kant's distinction between the transcendental and empirical sense of 'external reality' (i.e. noumena and physical objects). In an empirical sense, 'external reality' consists of *things which are to be met with in space*. These expressions are better understood in section 5.

moment let me introduce a quite broad definition of philosophical realism concerning the existence of the physical world:[12]

D_1) philosophical realism concerning the existence of the physical world $=_{def.}$ the philosophical position according to which there is an external reality and its nature (i.e. existence and properties) is mind-independent.[13]

In what follows I will refer to philosophical realism concerning the existence of the physical world as defined in D_1 (or in its more elaborated version D_6, see below) by the expression "ontological realism" ($R_{ont.}$). $R_{ont.}$ is one of the two basic formulas that will help us in settling the issue of the relation between the intrinsic nature and properties of external reality and the im/possibility of them being known by a HKS. Before considering a parallel definition of a version of philosophical realism in the field of "internal reality" let me make some introductory comments on D_1.

At a first sight the definition of $R_{ont.}$ given by D_1 may seem redundant: it claims that there is something like an external reality, and then that this external reality enjoys such and such existence (where the expression "such and such" is a way of parenthesizing for the moment the question of the "mind-independent" clause). Yet, the apparent verbose formula is due to the fundamental distinction between the possibility of the existence of an external world and the nature of such an existence. As far as the former is concerned, D_1 maintains that there is in fact an external world. In this respect D_1 is to be understood as accepting Moore's proof of an external world.[14] As for the latter question, D_1 doesn't limit

---

12) Cf. for example Nagel [1986], p.90, where he says: "I have at various points expressed commitment to a form of realism, and must now say more about it. In simple terms it is the view that the world is *independent of our minds*, but *the problem is to explain this claim in a non trivial way* which cannot be easily admitted by everyone, and thereby to show how it conflicts with a form of idealism that it is held by many contemporaries philosophers" (my emphasis). Such a starting point is very common, see for example also Putnam [1982], p.141 who refers to Russell and Moore for the concept of 'mind-independent'.
13) 'The real is what is unaffected by what we may think of it' Peirce [1958] 5.311, cf. also 6.327.
14) Cf. Moore [1959]

itself to speaking of the existence of an external world: it goes further by also specifying that the external world enjoys such and such existence and properties independently of something else, in the case of D_1 the human mind.[15]

According to this distinction, ontological realism turns out to be dealing with two questions: the An-question, whether or not there is an external reality, and the Quomodo-question, if there is, what sort of existence it has. For the ontological realist it is not enough to affirm the existence of an external reality, but it is also necessary to ensure that such an existence is independent of the existence of anything else. Someone may rejoin that when we say that there is an external world we also generally imply that such an external world enjoys an ontologically independent existence. The answer is that it is better to distinguish the two questions explicitly. For such a distinction is not just matter of formal correctness but it becomes of vital importance if we want to be able to understand forms of anti-realism like Idealism, which may accept the existence of an external world while denying that such an existence is independent of some other mental factors.

As Moore [1959] reminds us by quoting Kant, expressions like "external things", "things external to us", "things external to our minds" carry with them an unavoidable ambiguity for:

"sometimes it [they] mean[s] something which exists as a thing in itself distinct
from us, and sometimes something which merely belongs to external appearance (Kant,
K.d.R.V., A 373) (p.129)

The different understandings of "external reality" (henceforth also ER) in D_1 may range between the two following extremes: on the one hand ER may be intended as the "reality in itself" (the Kantian noumenon) which lies beyond human cognitive capacities; on the other hand ER may be intended simply as "the reality we deal with", as it is present in our knowledge, opposite to dreams or illusions. Both senses can be justified

15) Cf. Stroud [1984], chap.3.

and their distinction is or is not necessary only according to a specific position about epistemological realism. As we will see more clearly in a moment, since ontological realism is supposed to present the point of view of common sense about the nature of the world, ER must be assumed to consist of instances of the common reality we meet every-day, and as if, at least initially, everyday reality were identical with reality in itself (*epistemological naive realism*).

Following the foregoing specifications, it is better to slightly modify D_1 in order to (i) render more evident that $R_{ont.}$ answers the An- and the *Quomodo*-questions, and (ii) to allow both the extreme interpretations of the expression "external reality" and consequently all the possible middle ways, thus:

$D_2)R_{ont.} =_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) a portion (greater than null, but not necessarily equal to all) of ER enjoys a *mind-independent* nature (i.e. existence and properties).

For the Kantian philosopher only a "portion of external reality" is mind-independent, exactly that *noumenal portion* which cannot be known, while for the naive realist all external reality is the reality in itself, mind-independent, and this is so exactly because he knows that this is so.

In section 5 we shall see that D_2 is more problematic than it seems to be. But for the moment, let us accept it with the *proviso* of some further specifications, since I need now to introduce a general definition of what is generally meant by "realism" in the second area of the mental world.

In the second vast area where the term "realism" may occur to identify a philosophical position, viz. internal reality or the mental world, interpretations of different types of realism vary radically, according to the fundamental orientation of the discussions of the topic

and of the interests of the philosophers[16]. So that, like before, our first step will consist in individuating which perspective is more adapted to the purpose of spelling out the thesis implicit in the Traumatic Doubt.

Since the present analysis aims at an unequivocal formulation of the role played by the problem of *human cognitive access* to the intrinsic nature of external reality in generating the TD, I shall confine myself to the following three restrictions:

i) speaking of realism (or anti-realism) in the *epistemological field*;

ii) assuming that the epistemological field concerns *general, objective knowledge*;

iii) aiming the discussion of realism about *objective knowledge* to the understanding of the nature of the *epistemic relation* (R_e) which may occur between a human knowing subject (HKS) and external reality (ER). I will define "epistemological realism" the position which contemplates more than any other the possibility that a HKS might know the intrinsic nature of ER, and "epistemological anti-realism" the position which more than any other doesn't. Just as I used "$R_{ont.}$" for "ontological realism" I shall use "$R_{ep.}$" for "epistemological realism". Accordingly, our starting formula for $R_{ep.}$ will be:

D$_3$) philosophical realism concerning the value of human knowledge $=_{def.}$ the philosophical position according to which a (normal) human knowing subject (in the best case) has a perfect objective knowledge of the intrinsic nature (i.e. the intrinsic existence and intrinsic properties) of external reality.

Both the three restrictions (i)/(iii) and D$_3$ call for further explications, and I will turn to them in section 6. For the time being I shall presuppose a generic understanding of D$_3$ in order to come back to a more detailed explanation of what I meant by ontological realism in D$_{1/2}$.

---

16) Cf. for example Hirst [1967], Horwich [1982], Haack [1987], Dummett [1963] and [1982], Putnam [1976] Field [1982].

I.5 ONTOLOGICAL REALISM

D_2 defines $R_{ont.}$ in rather intuitive terms. It represents the position we may accept should we casually say what we think about the existence and the properties of things and events in the world. Yet, as soon as we try to understand better its theoretical implications, its intuitiveness starts disappearing. The problem I'm referring to is not the well recognized problem that, since $R_{ont.}$ as defined by D_2 is a radical philosophical position, then it needs good supporting arguments if it is to withstand the usual sceptical attacks. As I remarked in the General Introduction, to raise this problem here would be completely out of context, since this kind of scepticism is thoroughly irrelevant to the issue. What I'm rather suggesting is that, before the question of the validity of $R_{ont.}$ can arise, we are faced by the difficulty of understanding what such a position means, on the ground of D_2. More explicitly, I want to suggest that under the light of a closer examination D_2 turns out to be an *inadequate definition* of what we really mean when we are professing a common realist attitude towards external world.

I believe the cause of this inadequacy is the introduction of the "mind-independence" clause, which is more problematic than its vast popularity could induce us to believe. The use of the "mind-independence" underlies the tacit target of giving a definition of $R_{ont.}$ on a purely ontological basis, that is at the level of a relation of ontological independence either among existences of entities, if you endorse the view that human minds are some kind of entities, or between the existence of entities and the presence of noetic activities, if you endorse the view that human minds are some kind of functions or dispositions of human brains. My aim is to show that not only D_2 but any such "purely ontological" definition of $R_{ont.}$ fails to cope with the task of giving a proper definition of ontological realism, and that a proper understanding

of $R_{ont.}$ must be necessarily related to some broad understanding of $R_{ep.}$. We shall see that this necessary epistemological shift in the definition of ontological realism brings with it the important problem of leading to the formulation of the TD. But more on this in due time.

I.5.a "MIND INDEPENDENCE"

In order to cast some light on the difficulties implicit in D_2 and particularly on how the "mind-independence" clause may generate problems for the definition of $R_{ont.}$ we can limit our attention to (ii) of D_2. Let me first reformulate it more analytically.

If we accept that in the case of D_2-(ii) "to be x-independent" can be translated into "to be not affected by the presence or absence of x"; that in turn this latter can be translated into "to be ontologically independent of x"; and finally that this latter can be translated into "to be in a relation of ontological independence (R_{oi}) to x" then we can reformulate the definition of $R_{ont.}$ as the philosophical position which holds that:

$D_{2.1}$) D_2-(i); and (ii) a portion (greater than null, but not necessarily equal to all) of ER has a nature (i.e. existence and properties) that it is not affected by the presence or absence of a mind (M);

that is:

$D_{2.2}$) D_2-(i); and (ii) a portion of ER has a nature (i.e. the existence and properties) that is ontologically independent of M;

that is:

$D_{2.3}$) D_2-(i); and (ii) $[R_{oi} \ (ER,M)]$.[17]

In order to explain $[R_{oi} \ (ER,M)]$ let me focus on the first and then on the second term of the relation. I shall argue that the universe of realities covered by ER, as we usually intend this latter out of the

17) I believe the question whether 'being mind-independent' can be considered a relation at all can be answered positively following Brentano, who refers to the dependence of intentional objects on the thinker in terms of 'relation-like'. Cf. Chisholm [1957], p.146.

definition, is greater than the universe of realities covered by ER, as this turns out from the acceptance of the "mind-independent" clause. And therefore I shall criticise the use of the "mind-independence" clause for the definition of ontological realism as inadequate since it makes no justice to what we would casually accepts as ontological realism.

Under the label ER are commonly gathered together both *natural and historical* objects, qualities, properties, facts or events. By "natural" I mean "belonging to the physical world" in a non technical sense of physical, and by "historical" (or "arificial") I mean "resulting from the presence of the animal *homo sapiens* on the earth" (or something very similar to these two statements). For example, by "external reality" we usually and non-philosophically refer to trees, natural colours and the fact that it rains, and to houses, artificial colours, my trip to Rome, your being higher than me. Note that I've left undetermined whether or not by ER we refer to *all* the natural and historical objects, qualities, facts or events. For example "hooliganism" is a historical fact due to historical events, there are hooligan actions which take place and "hooligans" is a negative description whereby we may pick up a certain kind of football supporters, yet we may not consider "hooliganism" an instance of "external reality", but more readily a social phenomenon, i.e. the result of the historical development of a certain portion of external reality. Note also that I'm not specifying whether or not all the natural and historical objects, qualities, facts or events that we consider instances of external reality also belong to that portion of ER which enjoys a mind-independent existence. All it is necessary to say on this point is that, according $D_{2.3}$ at least *some* of the natural and historical objects, qualities, facts or events are to be included within the portion of ER which enjoys a full, independent existence.

$D_{2.3}$ amounts to an attempt of maintaining the definition of $R_{ont.}$ at a purely ontological level. In order not to shift into an epistemological statement, $D_{2.3}$ appeals to an ontological relation of independence (R_{oi}) among existences, viz. the independence of ER's existence and its other eventual properties of M's existence and its other eventual properties. Why $D_{2.3}$ tries to eschew the epistemological shift and why the possibility of an "ontological-level-only" definition of $R_{ont.}$ could be a desirable target are questions I shall try to answer at the end of this section. At the moment it is more important to realize the difficulties of such a proposal.

In trying to avoid any reference to the epistemological field by means of the "mind-independent" clause, $D_{2.3}$ inadequately captures our usual understanding of ontological realism with respect to the extension of an independent external reality. In fact, what is gained through the "mind-independent" clause, viz. maintenance of the ontological level, is less than what is lost, viz. a clear explanation and an adequate expression of what the ontological realist means by the other element of the relation, i.e. an independent external world. There are four problems introduced by the "ontological mind-independence" clause, and only the first three of them can be partially resolved, while the last forces us to some epistemological modification of $D_{2.3}$.

First of all, there are serious problems in understanding what a "mind" is. We may say, as a first approximation, that what $D_{2.3}$ is obviously concerned with is a human mind. But even so, an already obscure concept like that of a *Ding an sich* is not made clearer by an appeal to a very controversial concept like that of "human mind". If we are not sure about what we should understand by a human mind or a world in itself or whether there exist such two things like a human mind and a world in itself at all, why should we be better off by speaking of a human mind-less world in itself ?

A second difficulty is that $D_{2.3}$ needs either to presuppose that the human mind is the only type of mind in the universe, or to add a supplementary specification about other possible non-human minds e.g. God's. Otherwise Berkley might count as a an ontological realist, and one of the tasks of the definition is exactly avoiding such a possibility.

But let us suppose that $D_{2.3}$ assumes that the human mind is the only type mind there exists. Even if we should agree on a satisfying understanding both of the concept of human mind in terms of psychological, cognitive and intentional human capacities and of the concept of a world which is independent of such a noetic element, still some form of ontological anti-realism in terms of ontological dependence of the world on the presence of human beings could slip into our account. Think for example of a philosophical position maintaining that the world is what it is because there is a continuous community of human souls, or human wills, that guarantees its existence. The position sounds a bit too *mystical* to be seriously contemplated by an analytic philosopher, the same philosopher who, however, seems to accept a clear form of *intellectualism* by speaking only in terms of "mind-independent". And yet, insofar as a soul or a will is different from a mind, the position should be accepted as not being necessarily incongruous with our version of ontological realism, were we to stick to our "mind-independent" definition[18].

But the most serious problem is due to the fact that we cannot really carry on speaking in $D_{2.3}$ only of a singular human mind, limiting ourselves to a sort of Cartesian doubt which concerns only *my own* possibility of having created *my own* world. The issue tackled by $R_{ont.}$ goes beyond the problematic relation between me, the outside world and my im/possible knowledge of it. $R_{ont.}$ would like to be in clear opposition to forms of idealism not only a` la Berkley but also a` la Hegel. But whereas a

---

18) Of course someone may have the idea of re-defining our understanding of human minds so to enclose in the term eventually also the spiritual characteristics of human beings and cover also the case of the ontological spiritualist. But I think this would only weaken our definition, making the concept of 'human mind' too vague.

"subjective idealism" like Berkley's can be left outside R_{ont} - e.g. by the conjunction of (i) a clear understanding of what is my human mind, (ii) the ontological-independence relation R_{oi} occurring between ER and my mind, and then (iii) the specification that there are only human minds - this is not enough to stop a "speculative idealist" a` la Hegel from calling himself an ontological realist. For he won't ever appeal to someone's human mind but maybe to man's mind or to the Absolute Mind.

It seems that because of this difficulty $D_{2.3}$ is forced to enlarge the appeal to the characteristic of being independent of a human mind to *all the possible minds*. Unfortunately, after all these adjustments on the mind-side of the relation, $D_{2.3}$ is no longer adequate to express what the ontological realist thought about the nature of the other element of the relation, i.e. external reality. For in this new version D_2 would hold that:

D_4) R_{ont} $=_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) a portion (greater than null, but not necessarily equal to all) of ER enjoys a minds-independent nature (i.e. existence and properties);

and the problem with D_4 is that neither books nor cars can be interpreted as true examples of such "full existing" realities. For they cannot be counted in that portion of ER which is mind-independent, at least not completely. This difficulty requires a more lengthy elucidation since it is the principal reason underlying my rejection of the a definition of R_{ont} in terms of "mind-independence".

Suppose we have a sort of "ontological eraser" by means of which we eliminate from our present world whatever has been somehow determined in its being by some sort of human noetic activity since the beginning of the history of the human race.[19] If we stick to the "ontological eraser" policy implicit in D_4, an enormous portion of the world in itself, actually a lot

---

19) I believe that the device of the 'ontological eraser' is less fanciful than it seems to be, but that it materializes the procedure we tend to apply when asked in a non-philosophical context about what the world in itself is.

of what the ontological realist wishes to save, is lost. Not only are not cars and books objects *completely* independent of the existence or the activity of a human mind - which has previously conceived them, projected them and finally made possible for them to be what they are - but also much else attributed to nature around us (suppose we are living in the centre of a city like London) would hardly withstand the "mind-independent" test. Most of us spend their lifes in highly human-mind dependent environments. Human beings have changed the world so much that there is hardly anything in the world that hasn't been influenced by the noetic activity of gardeners, engineers, politicians, businessmen, soldiers etc.. The ozone-problem in the atmosphere is a good example. The problem is affecting the whole earth; it is easy to see how nowadays it would be difficult to find something whose nature hasn't been somehow modified by the presence of human minds. As human history advances the smaller is the portion of reality left untouched (more or less indirectly) by the human mind.

Certainly, it may be argued that there will always remain physical laws and matter and "original and virgin" states of the world. And yet, the minds-less possible-world closer to the actual, to put it a` la Lewis, would be too far from what the ontological realist meant when he first formulated D_1. Were we to follow D_4, $R_{ont.}$ would eventually concern only those parts or aspects of external reality which are unaffected by the presence of human minds in the world. And it is not easy to see how small this portion of ER would be. In the end, we would be forced to accept the unhappy conclusion that by $R_{ont.}$ we cannot *easily* refer to what we wish, viz. historical objects like cars, books or this computer, or historical events like Waterloo or Julies Caesar's crossing of the Rubicon. All the "historical" aspects of external reality, in the sense of "historical" above specified, won't be covered by $R_{ont.}$, since all these things or

events are more or less ontologically dependent on human minds, either for their existence and/or for their properties.[20]

Such problems are due to the assumption of a definition of $R_{ont.}$ in terms of a relation of "ontological independence" occurring between human minds, their noetic activity and external reality. It seems that the desire of maintaining the definition of $R_{ont.}$ at an exclusively ontological level cannot be fulfilled and both the relation and the terms related must be revised if we want $R_{ont.}$ really express what the common-sense realist position asserts. But, before we endorse the necessity of an "epistemological shift", we need to be sure that there are no other possible "ontological-level only" versions of our starting formula D_1. The following examples show that any other attempt is likely to meet the same difficulties.

We may try to pass-by the previous difficulties by substituting the "mind-independent" clause with a "human beings'-existence-independent" clause. Moreover, we may also try to increase our chances to pick up the right selection of ER by adopting a semi-factual version of D_1[21]. In this way we obtain D_5. Some versions of it may be:

D_5) $R_{ont.}$ $=_{def.}$ the philosophical position according to which
(i); and (ii) a portion (different from nothing, but not necessarily equal to all) of ER is such that its nature (i.e. existence and properties),
$D_{5.1}$) would be the same even if there weren't human beings within it;
$D_{5.2}$) would be the same even if human beings were completely different from what they are now;
$D_{5.3}$) wouldn't be affected by the disappearance of human beings.

---

20) Of course there is a restricted version of ontological realism that limiting the quantification of "human beings" to a small number (if possible only one, me) of human beings enlarges the domain of what is independent of the existence of this small selection of human beings so much as to include also my car, this computer, the books I'm reading and the academic activity in my department (and yet, still not my going to the university). In the text is obvious that when I'm speaking of human beings I'm referring to all of them, to the whole human race.
21) I believe this is our best alternative. But see also (still in Moore [1959]) Kant's-Moore's version of D_2 in terms of 'distinction of existence' ("things external to our minds" as equal to "things which exist as things in themselves distinct from us"), and how it runs into the same unavoidable epistemological shift I've pointed out above in the text.

If this were not enough, we may also try to improve the "human minds-independence" semi-factual definitions by adopting a further, strong metaphysical position on the *time-dependence of any modal transformation*; to the effect that once something, that was possible, has happened, say a book has been written, such an event is irreversible and it makes either that thing, which is ontologically dependent on the event, or the event itself, ontologically independent of the human being who, at the beginning, was responsible for its "ontological coming to be".

Despite all these modifications, the crucial problems listed above in a/d are not completely avoided. If there weren't human beings there wouldn't be houses; if human beings were different, houses wouldn't have the properties they have, if human beings should suddenly disappear, houses would start loosing the properties they have, decaying, and their existence would be definitely at risk. The conclusion is that houses are what they are because there are human beings that wanted and built them as they are, and take care of them, preserving their properties as these were projected. But according to our "ontological eraser" we would have some problems in counting houses as *obvious instances* of external reality. "History" remains in a sort of *ontological limbo* between what is fully independent of human minds and what is not.

Even the proposal of including some chronological considerations does not solve the problem. First, it can apply only to versions of D_1/D_5 similar to $D_{5.3}$, as when someone says that after human beings have written books, if they should disappear those book would not be affected by the event, and therefore those book have become physically independent of human minds or beings. But, secondly, not even the chronological improvement of $D_{5.3}$ could work. As before, it does not take into account the fact that without continuous human care and supervision historical reality would not last for very long. Without human beings artificial aspects of reality would not remain unchanged for ever, like a frozen picture of the present

world. Libraries would start decaying and books would be destroyed. To give another example, although pollution is something that I would like to consider "real", it would not stand the test of a chronological version of $D_{5.3}$, for in fact it would be affected by the disappearance of human kind. Moreover, as for the case of the use of the "mind-independent" definition, an appeal to semi-factual analyses of D_1 amounts to an explanation of what is already not clear in still more obscure terms. A semi-factual explanation would imply an appeal to the semantics of possible worlds, but then an ontological commitment whose general sense is exactly what we are trying to understand here. The proposal of a chronological improvement of the semi-factual interpretations would only make things even more complex, by adding a very controversial metaphysical view about the nature of time to the already problematic semi-factual understanding of what a minds-less *Ding an sich* is.

In conclusion, the various versions of an "ontological-level only" definition of $R_{ont.}$ are very tempting and can even be partially illuminating, but their utility doesn't go further than a first intuitive level. For they all face the same problem: they have a conception of what is an independent external world narrower than the one we ordinarily have, and therefore cannot be taken to express the ordinary approach to ontological realism.

If we really want to express the common position of an ontological realist in its initially intuitive features we are forced to sacrifice the aim of maintaining the definition of $R_{ont.}$ at an exclusively ontological level. The point can be generally stated by referring to the thorny distinction between *internal* and *external relations*. A "mind-independence" relation is too close to being interpretable as an *internal relation* between mind and reality to be also employable as the right touchstone for discriminating among different instances of reality. Keeping ourselves at the level of an empirical common-sense we must turn to such a relation that

it is more likely to appear *external*, even under the light of a more detailed empiricist scrutiny.[22] Such an *external relation* can be obtained by invoking some kind of epistemological notion.

I.5.b THE EPISTEMOLOGICAL SHIFT

The failure of $D_{1/5}$ urges us to a shift into the epistemological area[23]. We are induced to introduce an epistemological element as the second term of the relation, so that the relation R_{oi} would acquire the characteristic of being *external*. I say "introduce" but I could have also said, perhaps more precisely, "re-introduce". For in modern philosophy the second term of the relation concerning $R_{ont.}$ is generally "human knowledge" or "perception"[24], not "human minds" or "noetic activity".

Provided we want to avoid the difficulties faced by the "mindless" clause, what we need is a technical term by means of which we can refer to different kinds of epistemic or doxastic activities, but that at the same time does not imply a commitment to the thesis of the independence of historical instances of ER of human knowledge *tout court*. The term must be such as to pick up any kind of human epistemic or doxastic activity that is not also "productive", that is not also an instance of "knowledge-how", not just in the linguistic sense but especially in the *engineering sense* of the expression. An example will help to illustrate the importance of the specification.

---

22) This reference to the internal/external relation issue is important in order to understand the idealistic strategy against the TD in III.3.c. This also explain the stress I've put on the 'empiricist' kind of analysis I shall carry on in this context, still with an eye to the common-sense position.
23) This is what is generally done by many authors, even when they don't seem to realize such a shift, cf. for example Moore himself in [1959], p.132, 134-135, 144 and Nagel [1986] chapter VI.
24) This is so not only in Berkeley's famous 'esse est percipi', but also in Collingwood's argument in favour of the idea that 'knowledge makes a difference to what is known', cf. Post [1965] and Donagan [1966].

The computer I'm working with is a practical achievement of human knowledge. Its existence and its properties are due to that human technological knowledge which is aimed at the physical production of an effect on, or of an object out of physical reality. But "technological" doesn't mean much more than "belonging to a way of doing"; and if the term is used with a strong etymological meaning, then we have that this computer has a nature which is strongly dependent on human "knowledge-how". On the other hand, according to R_{ont}. the nature of this computer is not dependent on my or anyone else's perceptions, beliefs, or other epistemic/doxastic activities in terms of recognition. Without denying that this computer is the product of human knowledge, the ontological realist wants to say that even if nobody e.g. perceives it or believes in its existence, its nature is not affected by such a lack of "perceptual or doxastic attention". Then, it seems that "acknowledgment" is the best candidate for such a specific terminological task.

First, according to the second edition of the Oxford English Dictionary, "acknowledgement" means also "knowledge", "recognition" and then "admission" and "formal declaration". Secondly, by adopting "acknowledgment" we will be able to draw the distinction between the fact that the nature of this computer is dependent on human knowledge in the sense of "know-how", and the fact that it is also completely independent of human knowledge in the sense of "acknowledgment". Finally, the use of a term like "acknowledgment" can also explain why philosophers have always been so fond of perceptual exemplifications of knowledge, particularly those visual, in the description of intuitive versions of ontological realism. These perceptual exemplifications represent an effective way of illustrating ontological realism in its more naive clothes. They convey precisely that sense of knowledge as "acknowledging" that I've been arguing to be essential for a satisfactory understanding of R_{ont}..

Having said this, I shall use "acknowledgment" with a very broad meaning, such that it covers any epistemic or doxastic operations of a HKS (i.e. intuition, logical construction, imagination, empirical sensation, perception, rational elaboration, beliefs, faith etc.) *insofar* as these are not "technologically productive" in the sense above specified[25]. In this way the independence of ER's nature of human acknowledgment indicates the independence of ER's nature of being or not being known, but not of human knowledge tout *court*. According to $R_{ont.}$, ER's nature does not need to be recognized for what it is in order to be what it is. Its ontological status does not depend on the Kantian *court of reason*. By replacing "mind" with "acknowledgment" we obtain the relation of acknowledgement-independence. By adopting this latter in the definition of ontological realism we can try to balance a sound distinction between internal and external relations with the desire to advocate a "full" independent existence for external reality:

D_6) $R_{ont.}$ $=_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) a portion (greater than null, but not necessarily equal to all) of ER has a nature (i.e. existence and properties) independent of human acknowledgment.[26]

By the specification "human" D_6 is meant to cover the acknowledgement of any human being.

I believe D_6 express in more technical terms what we would casually assume to be an ordinary, common-sense realist position about the nature of external reality, although it is still in need of a final refinement in order to be made completely unequivocal.

Echoing the problems seen above in a/d, it is possible to insinuate that D_6 is still too permissive in respect to other forms of anti-realism. More specifically, it seems to be still possible for an ontological realist

---

25) I'm not sure it is possible to divide neatly between instances of epistemic/doxastic activities which are non-technological or non-productive and instances that are technological or productive. Such a distinction can be limited to the use a HKS makes of such instances. This is the reason why I specify 'insofar'.

26) Cf. Peirce's version: "[...] There are real things whose characters are entirely independent of our *opinion* about them." (5.384; my italics). Like the Berkeleian use of 'perception', I don't find 'opinion' satisfactory enough for limiting the meaning of $R_{ont.}$.

to be confused with an idealist if this latter, while accepting the "human acknowledgment independence" clause of D_6 should also endorse some different view about the dependence of ER on some other possible factors, e.g. God's acknowledgment, the Absolute Mind's continuous noetic activity etc.. In order to avoid this kind of problems D_6 needs a *closure-clause* (CC) like the following:

CC) the same portion of ER selected by (ii) in D_6 is such that if its temporal nature (i.e. its existence and properties) can partially depend on some ulterior factor, it can only depend on a previous human physical activity or human technologically-productive knowledge.

The specification introduced by "temporal" eliminates the possibility of accepting any *theological occasionalist position*. It can also be dropped by those who don't believe that there is any sense in which the genesis of the external world can be dependent on a Divine Power in an a-temporal way.

The closure-clause divides ER in two domains: items of external reality whose nature can depend on human physical or technological activity, and items of external reality whose nature doesn't. Roughly speaking, the former belong to what I've called *historical external reality*, the latter to *natural external reality*. "Roughly speaking" because, for example, it would be hard to draw a neat separation between those physical states enjoyed by my cat that are completely independent of my activities (like my buying his food), and those which are not. In any case, according to D_6 and CC both sets of items are ontologically independent of human acknowledgment and cannot depend on any other non-physically or non-technologically productive human factor.

CC does not aim to a definite exclusion of the possibility of some idealistic adaptation of D_6. For example, if all an idealist wants to say is that there are large portions of external reality whose existence or properties are artificial. i.e. due to human activities, then, according to CC, this is not matter of disagreement with the ontological realist. Thanks to the epistemological shift, by the conjunction of D_6 and CC (D_6+CC) we

can now assume that this sense of "ontological dependence" is simply no longer relevant to the characterization of ontological realism.

The same reasoning in favour of the adoption of the "acknowledgment independent" clause could have not been adopted also for supporting the "mind independent" clause. By limiting the definition of $R_{ont.}$ to a mere ontological relation, the adoption of the "mind independent" clause introduces too narrow limits for the conception of what an item of "independent external reality" is. The fact that D_1/D_5 work on a purely ontological level has the following two consequences. First, it renders the consideration that the nature of a book can be *somehow* ontologically dependent on a human mind a vital issue for a correct understanding of $R_{ont.}$. The possibility that some objects are what they are because of the presence of human minds becomes of central concern for such definitions. And secondly, precisely the same emphasis on a purely ontological level is also what makes the recognition of the possibility of ontological dependence of ER on M an important obstacle for our characterization of $R_{ont.}$. This is a difficulty that those definitions cannot disregard. In the end, D_1/D_5 turn out to be so *hyper-realist* that they are forced to leave a large portion of what we would like to consider external reality out of our definition.

On the contrary, D_6+CC may seem to introduce too large boundaries by the epistemological shift, such that they also allow a special kind of idealist to step inside. Yet, it is precisely the epistemological shift that renders the fact that the nature of historical items of ER can depend on a previous human physical activity or human technologically-productive knowledge sufficiently irrelevant to the description of what an ontological realist wish to maintain in D_6+CC. Once we have replaced "human mind" with "human acknowledgment", the frustrating possibility that my book and your car could depend in some sense on human minds or on their activities becomes a peripheral aspect of the issue. So much that if this *is* all the

idealist wants to maintain - and he could hardly maintain something very different while still accepting D_6+CC - then he can be admitted into the club of the ontological realists. The conjunction of D_6 and CC states that there is an external reality ER, that the nature of a portion, if not all, of this reality is independent of human acknowledgment, and that even if this part of this portion of ER can be interpreted as depending on human knowledge-how or physical action, this is simply not the issue at stake, for the only criterion of selection is now that of human-acknowledgment-independence. According to D_6+CC a book has the same ontological status of a star in a corner of the universe untouched by human history. Hence $R_{ont.}$ concerns also my car, this computer I'm writing with and my going to the university every-day. In this way the definition of $R_{ont.}$ is perfectly satisfying. In what follows I will assume that D_6+CC is precisely what the ontological realist means when he is speaking casually of a mind-independent world. For the sake of simplicity I will also avoid to specify the CC every time, yet the closure clause must be intended implicit in any form of ontological realism I will speak of.

I.5.c TOWARDS THE TRAUMATIC DOUBT

Time has come to discuss what the epistemological shift consists in, and what its significance may be for a proper analysis of the Traumatic Doubt.

Very briefly, in defining $R_{ont.}$, D_6 relies on the possibility of explaining what kind of existence ER enjoys in terms of its *independence of human (non-technological) knowing activities*. The epistemological shift consists in such a reference to the "internal world": the external world is described as that which is independent of my acknowledgment. If on the one hand we have seen that this reference is due to the necessity of a more precise clarification of what the ontological realist has in mind, on the

other hand the epistemological shift turns out to be the principal source of a substantial difficulty: it introduces the possibility of the Traumatic Doubt. This is why "ontological-level-only" definitions of $R_{ont.}$ are more appealing than the epistemologically contaminated D_6.

Once more, what is at stake is not some version of the sceptical challenge. D_1 as D_6 can be assumed as a metaphysical hypothesis: both can be translated in "I assume that things are such that D_1 (or D_6)". None of them has to be translated in "I'm epistemologically justified in believing that it is the case that D_1 (or D_6)". So that none of them has to face the sceptical challenge "How do you know that you are epistemologically justified in believing that it is the case that D_1 (or D_6) ?". Rather, the problem is that while D_1 speaks in terms of an ontological gap between existences, D_6 introduces, though very carefully, a logical gap between the external and the internal worlds.

The importance of maintaining a definition of $R_{ont.}$ at an ontological level was that the distinction between the existence/properties of external reality and existence/properties of human minds relied on a third element – namely the epistemological possibility of establishing such a distinction – without making it part of the definition itself. Then D_1 could still, with a certain force, let us consider irrelevant to the definition of ontological realism the problematic distinction between reality in itself and reality as it is known. But we have seen that the ontological level can hardly be maintained. On the other hand, the epistemological shift represents a dangerous preliminary to the formulation of the Traumatic Doubt. For by replacing the "human mind independent" with the "human acknowledgment independent", D_6 introduces a reference to the independence of ER of an "internal world". And once we should accept to work with D_6, the first formulation of a radical independence of external reality from our acknowledgement of it might easily give rise to the suspicion that there could be a larger gap between a phenomenal and a noumenal reality.

This is the basis of the doubt: "if the ontological nature of reality in itself is completely independent of my acknowledgment, then maybe it is completely different from what I take it to be". Contrary to D_1, D_6 insinuates the presence of a first microscopic fissure between the physical (external) and the mental (internal) worlds that opens the way to that major fracture between external reality as it is *in se* and external reality as it is for HKS that leads to the final, unrecoverable abyss of the Kantian dualism between two different realities of noumena and phenomena.

It is important to pause on this important consequence of the epistemological shift, even if the issue will be discussed at full length in the next chapter. Put simply, the adoption of a D_6-version of ontological realism brings about the two following problems: on the one hand, the problem of how we can know that the intrinsic nature of external reality is in fact independent of our acknowledgment of any sort; and on the other hand the problem of whether we can be really sure that such an independence is not so radical as to render the intrinsic nature of ER in fact epistemologically unreachable for HKS. In respect to such difficulties only two kinds of positions are possible for a positive acceptance of $R_{ont.}$, and both depend on an epistemological version of realism in respect to the nature of human knowledge. If we exclude the possibility of begging the question, the two alternatives to a sceptical attitude against $R_{ont.}$ are:

i) we can introduce the distinction between a (necessary) metaphysical *petitio principii* and an epistemological assumption by introducing a distinction between "knowledge" (acknowledgement) and "conception". The former could then be seen as the result of an epistemic process of knowing which may or may not modify/determine its content, the second could be seen as the result of a non-epistemic process like "conceiving" or "presupposing" a certain feature of reality or a possible world. As we shall see in III.5.c, through these distinctions we arrive at the Kantian

position of an unknown reality as a limit concept. The fact that there is an external reality such that its nature (i.e. its existence and properties) is independent of human acknowledgment is a conjecture, a limit-concept to which we arrive by means of a speculation that, by hypothesizing such a reality (noumenon), at the same time does not claim to know it. Should we abandon the idea of knowledge as described in $R_{ep.}$ we could still save $R_{ont.}$ by adopting this Kantian approach;

ii) we can assume a sufficiently powerful[27] version of $R_{ep.}$ such that it consents to a version of the following reasoning:

external reality is ontologically independent of human acknowledgement because human beings can know that it is independent of human acknowledgement; and human beings can know that ER is independent of human acknowledgement because they can grasp perfectly well what ER is, vz. in this case that its nature (i.e. its existence and properties) is independent of their acknowledging it or not.

The first alternative (i) operates by accepting a *form of dualism* between what reality is for human beings and what reality is in itself, to the effect that the former has an epistemological and the latter has an ontological value. It simply tries to make the best out of the impossibility of knowing the intrinsic nature of ER. The second alternative, on the other hand, operates on the basis of a strong form of monism, which ranges between the two following extremes:

- either external reality as it is for human beings (Husserl's colourful Lebenswelt) is sacrificed in favour of a "better" knowledge of it. And in this case the most popular option is generally represented by what can be called scientism. According to a scientist position human beings have a perfect knowledge of reality, reality is what it is independently of human

---

27) 'Sufficiently powerful' is to be intended in respect of the task of supporting the ontological realist's intuition as expressed in (D_6+CC). For example Moore's or Russell's theories of knowledge would be two weak versions of a $R_{ep.}$ 'sufficiently powerful'.

28) Cf. Putnam [1987] quoting Husserl and presenting Sellars [1966] as an important example of scientism.

acknowledgment and the Lebenswelt is a sort of epiphenomenon of the real reality known by the scientists; or, according to the opposite extreme of monism,

- external reality as it is in itself is sacrificed to "external reality" as human beings are acquainted with. According to such an unreflective naive realism reality is exactly what I take it to be when I'm leading my daily life, and I have a perfect cognitive access to its intrinsic nature.

The first perspective is the one I'm going to employ in order to articulate the TD and analyze the possibility that external reality *in se* may be different from what we take it to be. The second alternative will be included in the list of candidates for a solution of the TD, and as such I will turn to it in III.4.a. For the present, however, the attempt of providing a better understanding of what was implicit in $R_{ont.}$ drives us towards the further necessity of giving a more detailed description of the epistemological side of the Doubt.

I.6 EPISTEMOLOGICAL REALISM

In I.3 I've given a definition of epistemological realism that in the next chapter will make possible an analysis of the Traumatic Doubt in terms of a conjunction of $R_{ep.}$ and of $R_{ont.}$ This "orientation" of D_3 has been made explicit by the assumption of the three restrictions i/iii. Their explanation will now introduce three further specifications of D_3 that will give rise to a final reformulation of D_3 in D_9.

I.6.a REALISM IN THE EPISTEMOLOGICAL FIELD

The first restriction says that of the three possible sub-divisions of the second area of the realism-debate I shall focus on that

CHAPTER I 50

epistemological. By this I don't mean to endorse any thesis about the priority both of epistemic aspects of the realism debate over those logical or linguistic, or, in turn, of epistemology over logic or philosophy of language in respect to the same topic. I shall completely disregard the question whether or not some theoretical or empirical aspects of the debate should be reduced to some others. The only "priority" endorsed by the decision to focus on $R_{ep.}$ is in respect to the goal of analysing the content of the Traumatic Doubt. In the Doubt "reality might be completely different from what we take it to be" it is the (debate over) $R_{ep.}$ that is directly and principally called into question by (the debate over) $R_{ont.}$ and *vice versa*, not any other logical or linguistic debate about logical or linguistic aspects of realism. Hence I shall be only concerned with the *co-ordination* of $R_{ep.}$ and $R_{ont.}$. This is all the first restriction is aimed to make clear.

I.6.b THE EPISTEMOLOGICAL FIELD CONCERNS GENERAL OBJECTIVE KNOWLEDGE

This second restriction is less plain than the former and therefore it relies a little more on a stipulation. By "objective knowledge" I mean:

- "public knowledge", that is knowledge which can be communicated and shared by any human subject (in this sense an *ineffable intuition* is not an instance of objective knowledge);

- "potentially, propositional knowledge that, liable to some consideration concerning its values of truth", that is knowledge that could be presented in form of true, false, or true/false-indeterminate - but *not extraneous to any true-considerations*, like imperatives - propositions which can be formulated in terms of "knowledge-that";

- "rational knowledge", that is knowledge that can be supported by some (in a broad sense) logical argument;

and I don't mean:

- "knowledge which really describes the exact intrinsic nature of its object, independently of any interference coming from the knowing subject" (a form of epistemological realism according to which "objective" is to be understood as "perfectly grasping the nature of the known object");

and not even:

- "knowledge established and which is independent of the subject" (a Platonistic form of epistemological realism according to which "objective" is to be understood as "non determinate by the subject").

The additional specification "general" specifies that I'm not interested in determining objective knowledge as "perceptual", "rational", "linguistic" or the like, but I'm interested in the whole phenomenon of human knowledge. For example, if I should say that "human objective knowledge cannot grasp the intrinsic nature of ER" I should be interested in the consequence of this possibility, or in seeing whether there is any good reason to think so, but not in determining whether this is so because of some deficit in human perceptual knowledge, or in a limiting application of mental categories etc. Whenever it is not necessary, I shall drop the specification "general", leaving it as implicit.

In referring to the epistemological form of realism defined in D$_3$ by means of the label "epistemological realism" I don't mean to say that this is the only possible form of epistemological realism we can have. This because at least two essential reasons.

First, because there are other discussions of forms of objective epistemological realism that are concerned with aspects other than the possibility of an objective epistemological access to external reality. Think for example of the discussion about the relation between scientific and ordinary knowledge.

And secondly, because there may be other discussions of epistemological realism equally orientated towards the analysis of an epistemological access to external reality and yet not only, or not at all,

limited within the boundaries of "objective knowledge". In a very broad sense Epistemology can be concerned with any type of sources, processes and results of knowledge or knowing, and objective knowledge as above intended is certainly far from being the only form of knowledge that can be considered involved in making possible for HKS to have an access to external reality, think for example of the phenomena of "revelation", or "mystic intuition" etc..

Although these specifications will be of a certain importance in the next chapter (see especially II.4.b), at the moment I find easier to assume the device of limiting the concept of "epistemology" here employed (epistemology as the theory of general objective knowledge) than just to be forced to specify every time that we are working in a particular area of it (that certain area of epistemological studies concerned with general objective knowledge).

I.6.c THE DISCUSSION OF EPISTEMOLOGICAL REALISM AIMS AT UNDERSTANDING THE NATURE OF THE EPISTEMIC RELATION BETWEEN AN IDEAL HUMAN KNOWING SUBJECT AND EXTERNAL REALITY

It should be clear now that when I say that I'm concerned with "realism about the relation between objective knowledge and external reality" I mean that I'm concerned with the question whether a HKS enjoys a particular epistemic access to an eventually independent ER by means of objective knowledge. And that I don't mean that I'm concerned with the question whether objective knowledge enjoys a particular kind of existence.[29] The issue doesn't need further explanation, but two other important considerations can be made in connection with it.

First, restriction (iii) stresses once more why I don't generally need to distinguish between different types of knowledge, or at least

---

29) For this understanding of the epistemological realism-debate see for example Horwich [1982].

between scientific and empirical knowledge.[30] Once it is understood that the discussion of epistemological realism is only concerned with the possibility of having some kind of epistemological access to external reality in its intrinsic nature, the distinction within different types of knowledge becomes, if not insignificant, certainly marginal. Since "general objective knowledge" covers the domain of any possible knowledge that satisfies the broad standards above specified in (ii), the first problem faced by $R_{ep.}$ is whether any form of objective knowledge can play the role of such a perfect epistemic relation. And the question what such a form of objective knowledge would eventually be is secondary.

Secondly, the distinction between "process of knowing" and "knowledge as the result of the process of knowing" is necessary in order to introduce the concept of an epistemic relation (R_e) between HKS and ER. On the ground of (iii) I shall assume that:

- the process of knowing[31] consists of an epistemic relation (R_e) occurring between a Human Knowing Subject and External Reality; that

- the epistemic relation (R_e) can be represented as a symmetric epistemic relation; and that

- the occurrence of the process of knowing produces a certain result called *R-knowledge*; so that, given:

D7) $\{[R_e \text{ (HKS,ER)}] =_{def.} \text{process of knowing}\} =_{def.}$ P-knowing;

and

30) *Empirical knowledge* is that kind of knowledge consisting of all the occurrences of potential cases of knowledge that or propositional knowledge, conceivable - according to a bivalent logic - as either true or false about external reality in *its more accessible form to a human being*. Where the specification 'more accessible form' is meant to exclude any reference to highly elaborated scientific instances of propositional knowledge, and to limit it to examples of *common physical objects*, their *properties* and *usual* the *events* in which they play some role. Consequently, *scientific knowledge* can be interpreted as all the other potential cases of propositional knowledge not obtainable without a certain amount of theoretical elaboration (like the use of mathematics and precise measuring, the formulation of laws, the study of regularities, the method of hypothesis and deduction, or of inductive abstractions, etc.).

31) The process of knowing is not to be confused with the *cognitive processes*. These latter are part of the process of knowing as the *conditio sine qua non* for the presence of any R-knowledge at all, but a full understanding of the process of knowing also includes a discussion of the *ratio essendi* both of it and of the cognitive processes.

$$D_8) \ [\text{knowledge}_{\text{result}}] =_{\text{def.}} \text{R-knowledge};$$

it follows that

$$\{[\text{Re} \ (HKS,ER)] \ \text{produces} \ [\text{knowledge}_{\text{result}}]\}$$

can be schematically reformulated thus:

$$\textit{P-knowing produces R-knowledge.}$$

By defining "R_e" as *symmetric* I don't mean that:

i) the production of R-knowledge is due both to the fact that "HKS is epistemically related to ER" and to the fact that "ER is epistemically related to HKS" means that:

ii) the production of R-knowledge is due both to the fact that "HKS has knowledge of ER" and to the fact that "ER has knowledge [?] of HKS"; but rather, that (i) means that:

iii) the production of R-knowledge is due to the fact that "HKS and ER come to be mutually epistemically interrelated to each other".

According to D_7, the process of knowing consists of HKS coming to be epistemically related to ER - say by performing cognitive processes and aiming to a certain target (fulfilment of some curiosity, survival, desire to know, acquisition of a higher moral status etc.) - and of ER coming to be epistemically related to HKS, say by forcing HKS to perform some cognitive processes, by sensibly modifying his *tabula rasa*, by impressing HKS with sense-data, by activating his process of recollection, and the like[32].

---

32) A very similar distinction can be drawn by focusing on the result of the process of knowing: R-knowledge is generally seen as the result of both active and passive phases of the *cognitive process* (generally speaking, passive acquisition of data and active elaboration of them). But the meaning of 'active' and 'passive' are understood from a HKS-centred approach, the 'active' phases of the cognitive process being interpreted as those depending on HKS, and the 'passive' phases interpreted as those not depending on HKS. D_7 may also be understood as interpreting the 'passive' phases as those depending on the 'active' presence of ER. However the distinction is only 'very similar'. For the fact that R-knowledge can be interpreted as being due to active and passive phases of the cognitive processes is different from saying that they depend on active and passive phases of the process of knowing. Beside, this latter may be more adequately seen as depending on active and re-active phases of the epistemic relation between HKS and ER.

I.6.d A RE-DEFINITION OF EPISTEMOLOGICAL REALISM

The previous comments can help us to improve the definition of epistemological realism given by D_3.

A first improvement can be obtained by eliminating the two specifications in the brackets, i.e. "normal" and "in the best case". Their role is intuitive and it does not require any further explanation. In reformulating D_3 "(normal) human knowing subject (in the best case)" can be directly reduced to "ideal HKS".

A second improvement is more substantial. D_3 interprets R_{ep}. basically in terms of value of R-knowledge more than in terms of value of the process of knowing. This is not very precise and it will be better to modify it. Let me first use a comparison to explain why.

Suppose we want to give a commentary on a football game that is just finished with the victory of team A. Suppose that we want to say that A's victory is not due to fortuitous factors, but that A is really a better team than B. We have two ways of expressing A's superiority:

i) we may say that whenever A and B play a football game the result is always A's victory (we may even be more flexible by modifying the absolute term "always" adding probabilistic or tendencies-clauses like "more often" "very likely" etc., this is not crucial for the example); or

ii) we may say that, whatever the result may be, in fact A plays better than B.

This latter way of expressing ourselves is more adequate than the first in order to convey what we mean by supporting A's superiority. By referring to the "process" of playing we can disregard more easily fortuitous factors. The supporters of a certain team may still be justified in believing that their team plays better than any other despite the fact that it has lost every game of the championship.

If now we compare the position of the epistemological realist with that of the supporter of the A team we can see why defining $R_{ep.}$ in terms of value of R-knowledge is imprecise. What the epistemological realist wants to say is that, no matter what the specific result of the process of knowing is, the process of knowing is such that HKS can know the intrinsic nature of ER. D_3 expresses this concept by referring to the value of R-knowledge, but this is equivalent to say that a team is better than any other because of its victories: it may be largely true that if A wins all the games of the championship then A plays better than any other teams, and yet it may be that for some accidental reasons a very weak team W wins the championship even if everybody knows that W is not in fact the best team, and vice versa, that even if A is the best team, for some accidental reasons it hasn't won the championship. The epistemological realist is interested in what eventually makes possible a perfect objective R-knowledge of the intrinsic nature of ER, not in the real nature of the actual R-knowledge. Then he can avoid any accidental feature by referring to the process of knowing, not to its result.

The importance of a reformulation of D_3 on the basis of the value of the process of knowing is further supported by the consideration of the shift that, eventually, the nature of the relation occurring between HKS and ER would suffer. In D_3 the fact that we say that HKS "has a perfect objective knowledge" of ER implicitly limits the possibilities (and therefore the interpretations) of $R_{ep.}$ to the capacities of HKS to reach external reality. This because R_e can be seen as a one-way relation that makes the task of the epistemological realist even more difficult than it ought to be. By reformulating D_3 on the basis of the value of the process of knowing we can interpret R_e as a symmetric relation between ER and HKS such that the "responsibility" for the value of the result of such a relation, i.e. human R-knowledge, falls both on the nature of human activity exercised on external reality and on the value of the activity of

external reality exercised on the human knowing subject. Think for example of the Aristotelian doctrine whereby in a first stage the "passive intellectus" is so affected by the presence of an external reality as to become identical with the known object.

The third and last adjustment of D_3 consists in a clarification of the meaning of "perfect". The term specifies that, though there might be other kind of knowledge equally valid in grasping the intrinsic nature of ER, there cannot be anything better. For once the task of fully grasping the intrinsic nature of ER has been fulfilled, it can be only repeated but not surpassed.

According to all the previous remarks D_3 can be modified thus:

D_9) $R_{ep.}$ $=_{def.}$ the philosophical position according to which the process of knowing is such as to make possible the production of HKS' perfect objective R-knowledge of the intrinsic nature (i.e. the intrinsic existence and intrinsic properties) of ER.

We can now proceed to consider the connection of $R_{ont.}$ and $R_{ep.}$, in the next chapter.

CHAPTER II

THE PERPETUAL CHECK OF REASON

"There are more things in Heaven and Earth, Horatio
than are dreamt in your Philosophy"
Shakespeare, *Hamlet*.

II.1 INTRODUCTION

Once it is conceived, the Traumatic Doubt calls for some kind of response. As a propedeutic step towards the assessment of the possible replies, I suggested that the Traumatic Doubt could be decomposed into three components: the *ontological*, the *epistemological* and the *anthropological*. Uncovering the threefold nature of the TD makes possible to diagnose the different kinds of responses it may give rise to, more carefully. I shall discuss such replies depending on which of the three theoretical commitments they call into question. For this purpose I divided this study into two parts. In the second part I will investigate the possibility of a "resolution" of the TD in terms of a refusal of its anthropological component. Before, I mean to clarify the field by exploring the nature of the other two components that make up the Doubt. In the previous chapter I've been outlining the limits within which the Doubt can be decomposed into its two constituents. I will now establish more precisely what the epistemological and the ontological theses amount to and how they can interlock together to give rise to the Doubt.

Let me first recall that for each general form of realism we may stipulate that there is a corresponding general form of anti-realism. Assuming that[1]:

$$D_{10}) \ (\text{ontological Anti-realism} =_{def.} \text{non-}R_{ont.}) =_{def.} \text{Anti-}R_{ont.};$$

and that

$$D_{11}) \ (\text{epistemological Anti-realism} =_{def.} \text{non-}R_{ep.}) =_{def.} \text{Anti-}R_{ep.}$$

we have that there are four possible ways of connecting $R_{ont.}$ and $R_{ep.}$:

A) $R_{ont.} + R_{ep.};$

B) $R_{ont.} + \text{Anti-}R_{ep.};$

C) $\text{Anti-}R_{ont.} + R_{ep.};$ and

D) $\text{Anti-}R_{ont.} + \text{Anti-}R_{ep.}.$

With a satisfying degree of approximation (A) can be qualified as the most general form of *naive* or *metaphysical* or *dogmatic* realism, (B) as a general version of *Kantian realism*[2], (C) is interpretable as *Berkeley's anti-realism* ("anti-materialism" or "subjective idealism"), and (D) as a radical *sceptical position*, such as that resulting from the Cartesian-Demon hypothesis.

In this chapter I shall focus on (A) and (B), with the purpose of providing a final neat formulation of the Traumatic Doubt, under the label "Perpetual Check of Reason" (PCR). Like in the previous chapter, I shall proceed by means of successive approximations. The merits of such a detailed examination will emerge in the next chapter.

In section 2 I will discuss (A) as the conjunction of the two forms of realism defined in D_6 and in D_9. I shall call the product of $R_{ont.}$[D6] and $R_{ep.}$[D9] "Ingenuous Realism". Since the epistemological side of the TD

---

1) I shall also assume, for the sake of simplicity, that: 'to deny that p' is equivalent to 'to say that -p'.
2) The reason why I define this position as 'Kantian' becomes obvious in section 3. The reason why I define it 'realism' instead of 'anti-realism', when this position is, so to say, half realist (ontological side) and half anti-realist (epistemological side) has been implicitly given in I.3, where I've said that the first connotation of the dichotomy realism/anti-realism is ontological.

consists of a negative thesis, in section 3 I will state what *Epistemological Anti-realism* turns out to be if *Ingenuous Realism* has to be considered untenable. As a repercussion, I will give a reformulation of *Ontological Realism*, in order to spell out how deeply the negative turn in the epistemological side can affect $R_{ont.}$ (section 4 and 5). Finally, I will draw together the threads of these two chapters by producing a final, measured version of the TD as a particular interpretation of (B). I will label this logical reconstruction of the TD the "Perpetual Check of Reason" (section 6).

In the next chapter I will turn to the examination of (C) and (D) under the guise of two possible solutions of the PCR (cf. III.3.b; and III.5).

II.2 THE CONJUNCTION OF $R_{ep.}$ AND $R_{ont.}$: INGENUOUS REALISM

Ordinarily, we rarely discard our faith in *Ingenuous Realism*, and even when we do, it is for very short moments. In philosophy, quite the opposite is true: we rarely believe in Ingenuous Realism, and even when we mentally entertain it as a serious possibility, generally it is only for a short time. We are used to looking at it more as a mere starting point for further speculations than as a doctrine that could turn out to be well supported. In this section I shall adopt this latter philosophical attitude. I will describe Ingenuous Realism as the first position that could arise out of the conjunction of epistemological and ontological forms of realism. But I shall consider it a theoretical option that almost immediately fails to withstand sound criticism. I shall merely *presuppose the necessity* of the breakdown of Ingenuous Realism as a stage towards an accurate reconstruction of the genesis of the Traumatic Doubt. Hence, the hypothesis I'm subscribing to is that the possibility of the TD has its roots in the failure of Ingenuous Realism as a defensible philosophical

position. Only if we are at a loss with our initial Ingenuous Realism can we seriously conceive of the possibility of a whole world lying behind the reality we are acquainted with.

There is an evident, strong connection between ontological and epistemological forms of realism. Indeed the connection sketched in (A) can be so strict as to give rise to unified formulations of what may be referred to as *naive, metaphysical* or *dogmatic* forms of realism. An eminent case is that of Putnam [1981].[3] According to him:

> [metaphysical realism holds that] [i] the world consists of some fixed totality of mind-independent objects. [ii] There is exactly one true and complete description of 'the way the world is'. [iii] Truth involves some sort of correspondence relation between words or thought-signs and external things and sets of things. (p.49)

We can take this specific version[4] of $[R_{ont.} + R_{ep.}]$ as representing the happy initial condition of a lucky HKS who is not and maybe who is never going to be puzzled by philosophical doubts.

Why such an edenic condition should be referred to as "naive" or "metaphysical"[6] is understandable only in respect to two different theoretical perspectives. If we are mainly concerned with problems in the theory of empirical knowledge and perception then we are more likely to

3) It has been argued (cf. Field [1982]) against Putnam's position that such a unification of $R_{ont.}$ and $R_{ep.}$ in metaphysical realism is in fact obscure. I think that, even if the criticism might be partially correct in asking for a clearer distinction between what Field calls metaphysical realism1 (i.e., *mutatis mutandis*, our ontological realism) and metaphysical realism2 (i.e., *mutatis mutandis*, our epistemological realism; Field in fact introduce also a metaphysical realism3 about the nature of the theory of truth employed, I believe this might be easily considered part of metaphysical realism2), it misses the central point I've tried to present in I.4, i.e. that metaphysical realism1 cannot be adequately defined in purely ontological terms, without some shift into metaphysical realism2. For a further shift of Putnam towards interpreting metaphysical realism in terms of metaphysical realism2 cf. Putnam [1982].

4) There are at least two elements that make Putnam's definition of metaphysical realism only a version of Ingenuous Realism: the references to a theory of truth as correspondence and to a theory of knowledge working within the conception of knowledge as essentially constituted by "representations". Both elements are probably the most common tools of Ingenuous Realism, but there might be other version of it which don't necessarily adopt such 'Putnamian route'.

5) When our understanding of the connotation of R_{in} as 'dogmatic realism' cannot be reduced to what has been said in the text about the connotations 'metaphysical' and 'naive' this may be due to a certain *ethical meaning* implicit *nowadays* in 'dogmatic'. R_{in} may be seen as dogmatic either because of its uncritical acceptance of merely *prima facie* obvious truths, or because of the prejudices it conveys against other different positions. And as *dogmatic realism* R_{in} would seem to amount to a dangerous source of *intolerance*.

designate a version of $[R_{ont.} + R_{ep.}]$ as "naive". In this case $[R_{ont.} + R_{ep.}]$ is naive compared to other, more sophisticated theories. On the other hand, if we are mainly concerned with problems regarding the nature of reference, of truth and the limits of human epistemic capacities, then we are more likely to designate a version of $[R_{ont.} + R_{ep.}]$ by using the expression "metaphysical realism"[6]. In this case $[R_{ont.} + R_{ep.}]$ is metaphysical because it may imply an optimistic commitment to some description of the nature of external reality, and to the epistemic relation which is possible to engage with it. Clearly by defining a version of $[R_{ont.} + R_{ep.}]$ either as naive or as metaphysical we are implicitly stressing respectively more on the nature of $R_{ep.}$ or more on the nature of $R_{ont.}$. This is the reason why I shall opt in favour of a further term like "ingenuous" to label [Ront. + Rep.]. By definition, I will assume that its meaning won't rest upon one more than upon the other side of the conjunction, so that:

D_{12}) $[R_{ont.} + R_{ep.}]=_{def.}$ Ingenuous Realism $=_{def.} R_{in.}$.

"Ingenuous" doesn't have all the historical implications of "metaphysical", and it should be taken both as a mere synonym of "naive", and as a synthesis of the two terms, thus covering the ontological and the epistemological meanings of both.

The most general formulation of Ingenuous Realism is obtainable by simply connecting D_6 and D_9. Being careful to leave the largest space of manoeuvre for different interpretations of such a conjunction, I would recommend the following definition:

D_{13}) $R_{in.} =_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) the intrinsic nature (i.e. existence and properties) of ER, both in its historical and in its natural aspects, is on the ontological side completely independent of HKS' acknowledgment and on the epistemological side perfectly knowable by HKS, thanks to the nature of the process of knowing.

_____

6) The overlapping of the two expressions shows once more the terminological difficulties inherent to the use of the dichotomy realism/anti-realism.

D_{13} records both that in the case of Ingenuous Realism, the portion of ER ontologically independent of human acknowledgment is identical with the whole ER, and that the process of knowing is such as to make possible HKS' perfect objective R-knowledge of the intrinsic nature of ER, in particular the formulation of $R_{in.}$ itself. D_{13} requires two general comments.

First, it is important to stress that D_{13} is not what we actually have in mind while we are doing our shopping at Sainsbury's or while we are thanking aunt Francesca for her awful Christmas' present. D_{13} is a technical formulation which aims at defining the content of a more informal position. It is a logical attempt to bring to light what is only implicit in the ingenuous realist attitude that, we generally agree, is tacitly assumed in every-day life.

Secondly, despite their unified formulation in $R_{in.}$ the relation between $R_{ont.}$ and $R_{ep.}$ should't be understood as a necessary tie, such that if one form of realism would collapse then the other would as well. Although in $R_{in.}$ both $R_{ont.}$ and $R_{ep.}$ find their fullest application by being interlocked together in a mutually supporting circle, the two forms of realism still remain at least partially independent of each other[7]. So that a denial of the value of $R_{in.}$ won't necessarily amount to the acceptance of the radical sceptical position presented in (D). Depending on which side of $R_{in.}$ is rejected we may opt for one or the other of the two alternatives (B) or (C).

If only someone could really stick to it, there is nothing wrong with $R_{in.}$. In effect $R_{in.}$ makes life much easier and comfortable, and I'm convinced that such advantages should not be undervalued. The majority of human beings seem to endorse some version of $R_{in.}$ and also this fact

_____

7) This also means that in $R_{in.}$ $R_{ont.}$ and $R_{ep.}$ are coordinated, not subordinated one to the other. Not only $R_{in.}$ should not be interpreted as a reached theoretical position but rather as a presupposed starting point of view, but eventually its value should not be conceived as grounded either on epistemological or on ontological arguments.

should not be dismissed too quickly. So how does it happen that $R_{in.}$ should ever be abandoned ? A full investigation of the most acceptable answers that have been provided for this question goes far beyond the limits of this chapter. So let me just sketch what I would not accept as a good answer.

We may easily distinguish between *prescriptive* and *factual* reasons for disposing of $R_{in.}$. The only answers I would be ready to accept are those elaborated in terms of *factual reasons*. Schematically, the *prescriptive reasons* amount to a kind of philosophical exhortation. There is a sort of Platonic tendency that I seem to recognize e.g. in authors like Descartes, Sartre or Rorty, to invest the philosopher of the role of a leader, of the man whose task is to come back to the cave to set his fellows free from their "dogmatic dreams", to urge them to go beyond the realm of *mere appearances*. The obvious challenge for this kind of approach is to demand a justification for this attitude. We know that soon or later in the chain of his arguments such a philosopher will have to appeal to some metaphysical or transcendent reasons, like the "true nature of man" or the aim of "leading a worthy life". At that stage the point at stake becomes whether metaphysical reasons can ever be forceful enough to motivate the abandon of our Ingenuous Realism. And alongside Peirce's anti-Cartesianism, I would say that they cannot. *In fact one can really doubt of his naive knowledge of the world only because of some actual reasons, call them practical, empirical or factual.* Someone may come to doubt the validity of $R_{in.}$ because of new discoveries that change his picture of external reality, or because of the detection of errors in his knowledge there where he thought there couldn't be any and so on. Whatever the origin of the initial doubt may be, a reasoning by analogy will easily accomplish the final target of discharging $R_{in.}$. The route followed by our suspicious ex-realist can be given in terms of selection of "Cartesian apples"[8]. If

---

8) Cf. Descartes [1984], 'Author's Reply to the Sixth Set of Objections', p.324.

the set of my beliefs is like a pile of apples, and I thought all of them were good, but now I discover that some of them are not, then maybe I wasn't only partially wrong in believing that all of them were good, maybe I was completely wrong and all of them are bad. In one way or another a human knowing subject may come to doubt the value both of $R_{ont.}$ and of $R_{ep.}$. In particular, he will no longer consider the mutually supporting relation occurring between the two forms of realism a virtuous circularity to be trusted. Like a jealous person ("maybe I'm being deceived or I'm wishfully deceiving myself, maybe ER is not 'faithful' to me"), a HKS will become suspicious of all the evidences, if there are still any, in favour of $R_{in.}$. He then won't probably stop challenging and doubting his position until his harmonious every-day relation with external reality will be overcome. At this stage he will be ready to look for alternative proposals.

As there may be different reasons to abandon $R_{in.}$ so there may be also different termini after one departs from $R_{in.}$. The one directly implicated by the formulation of the TD consists in B: the idea that there might be a more or less extended portion of reality which is beyond the capacities of human knowledge to grasp, i.e. $[R_{ont.} + Anti-R_{ep.}]$. The arrival at a version of Kantian realism from the "breakdown" of $R_{in.}$ can be explained in coarse terms by invoking the scheme (A/D). If $R_{in.}$ is no longer acceptable for some necessarily compelling reasons, for example a Humean criticism, then before embracing a radical sceptical position like (D) there is the alternative of abandoning or trying to improve one or another of its components, vz. either $R_{ont.}$ or $R_{ep.}$. And at this point there are at least two reasons why, if something must be modified in $R_{in.}$ the first attempt is going to concern $R_{ep.}$. First, because we are simply more reluctant to accept some form of Anti-$R_{ont.}$ than some form of Anti-$R_{ep.}$. We are more ready to contemplate the possibility that there are some sort (cf. the following section 4 both for a specification and a mitigation of this clause) of limits to how much of the intrinsic nature of external

reality human knowledge can grasp, than to accept the more radical suggestion that there isn't an intrinsically independent external reality.

The second reason is that we are led to abandon $R_{in.}$ by epistemological considerations, and so it is natural to focus on the epistemological side of $R_{in.}$ before trying any other alternative solution[9]. Thus B seems to be the first position we encounter following the collapse of $R_{in.}$. However, let me make clear that it is not indispensable to accept a direct link between Ingenuous Realism and Kantian Realism (A and B), for my present purpose to proceed towards a a rigourous formulation of the TD, and for that purpose the development of the breakdown of A into a version of B can be introduced as merely stipulative.

The departure from (A) ($R_{in.}$, [$R_{ont.}$ + $R_{ep.}$]) in favour of (B) ([$R_{ont.}$ + Anti-$R_{ep.}$]) amounts to the substitution of $R_{ep.}$ by Anti-$R_{ep.}$. Time has come to elucidate what epistemological Anti-realism consists in, in order to be able, later, to understand how the departure from $R_{ep.}$ influences the nature of $R_{ont.}$.

II.3 EPISTEMOLOGICAL ANTI-REALISM

According to $R_{ep.}$[D9] the process of knowing is such that HKS has a perfect objective R-knowledge of the intrinsic nature of ER. As a first approximation, the definition of epistemological Anti-realism could be tailored on $R_{ep.}$, simply by denying D9, in the following way:

---

9) As Kant himself says, what led him to investigate the nature of knowledge were the antinomies of pure reason, the fact that about the most important topic human knowledge could equally be assertive or negative without there being an apparent way of solution. He even thought about beginning the *Critique of Pure Reason* with "[...] what I have entitled the 'Antinomy of Pure Reason', which could have been done in colourful essays and would have given the reader a desire to get at the sources of this controversy" ([1967], p.96). However, it is not necessary to agree with me on the relation between the crisis of $R_{in.}$ and the elaboration of a some version of Kantian realism. The final value of the hypothesis set forth in section 4 does not rest upon this point, and eventually it may be just considered a way of introducing the contents of section 6. As I said above in the text, the purpose of these few remarks on $R_{in.}$ is only that of presenting a more problematic relation between $R_{ont.}$ and $R_{ep.}$ that is (B) [$R_{ont.}$ + Anti-$R_{ep.}$]).

D$_{14}$) Anti-R$_{ep.}$ =$_{def.}$ the philosophical position according to which the process of knowing is not such as to make possible the production of HKS' perfect objective R-knowledge of the intrinsic nature (i.e. the intrinsic existence and intrinsic properties) of ER.

By amending D$_{14}$ we will obtain the final definition of Anti-R$_{ep.}$ in D$_{15}$. For this purpose I shall remark, in turn, on four aspects of D$_{14}$.

First, D$_{14}$ means that the nature of (at least one of) the three components of [R$_e$ (HKS,ER)] is such as to produce a significant hiatus between the ordo rerum and the ordo idearum[10]. According to Anti-R$_{ep.}$ the possibilities of human knowledge are limited (as we shall see in a moment, either in a qualitative or quantitative sense) to a partial grasping only of a certain portion of ER, so that it is conceivable that the infinite ordo rerum is in fact not only larger than, but also different from the infinite ordo idearum. There would be an unknowable, ontological residuum (if we refer to "bigger") or alter (if we refer to "different") of ER, viz. the intrinsic nature of ER, which would remain beyond the limits of human knowledge.

The second remark concerns different ways of understanding D$_{14}$ in more positive terms. To give some examples, D$_{14}$ could be taken to mean that "R$_e$ is a modifying relation through which HKS can grasp only part of the intrinsic nature of ER", or that "R$_e$ is a modifying relation which allows to HKS only a (more or less) partial access to the intrinsic nature of ER", or again that "R$_e$ is a modifying relation by means of which a limited epistemic contact between HKS and ER is possible". These, like other possible formulations, have in common the characteristic of employing a half metaphorical, half technical terminology. D$_{14}$ avoids any commitment to a particular epistemology by producing a merely negative formulation of Anti-R$_{ep.}$. A more positive formulation of Anti-R$_{ep.}$ will be sufficiently generalised only by avoiding epistemological terminology that is too

---

10) By these two Latin expressions obviously I don't suggest that ER is made of things (res) and R-knowledge of ideas (idea), but rather that there comes to be a difference between the external world as it is in itself and the external world as it is for us.

specific. This is what motivates the use of expressions like "to grasp", "partial access" or "full contact".[11] Suppose, for example, that we were to adopt three traditional, epistemological terms like "representation" "description" and "correspondence" in order to say that: what D_{14} means is that R_e is a modifying relation

i) by means of which it is possible to produce a set of *representations* that *reflect* or *illustrate* something different from the intrinsic nature of ER; or

ii) that can produce a *description* in terms of Cartesian *ideas* or Kantian *judgments* or post-Linguistic-Turn- *propositions*, of ER whose content are different from the *corresponding* intrinsic nature of ER.

We have seen that this is the way Putnam express himself. Yet none of these or similar purely technical versions is safe from the criticism of being meaningful and intelligible only within a specific epistemological theory[12], namely that which assumes the same technical terminology. To limit our attention to the example already mentioned, in Putnam's case the adoption of too specific terminology contributes to drive him to the rather queer assertion that a common position to all the metaphysical realists is a full commitment to the theory of truth as *correspondence*.[13] Now this is true only within a certain theoretical contexts. Since in this chapter my principal target is the production of a *general* formulation of the TD such that different epistemologies can be reinterpreted as different attempts to cope with it, it follows that in this context a partially metaphorical terminology is inevitable. For only by this device it is possible to obtain a perspective wide enough, which in its turn makes the whole manoeuvre of the next chapter possible.

---

11) It is important to keep in mind that by these metaphorical expressions I don't mean to refer only to 'knowledge by acquaintance'.

12) In these two particular cases, the criticism could be that the formulation is working within the modern conceptual scheme of knowledge as knowledge of some mental product shown in a *foro interno*, cf. Rorty [1979], first and second part.

13) Cf. Putnam [1976], p.177.

In this way we come to the third remark I wish to make. When I said earlier that D_{14}, or any other cognate versions; refers to R_e as to a *modifying relation* occurring between HKS and ER, by "modifying" I meant "altering" and/or "selecting". It is now of the utmost importance to understand that, in such a Kantian-like context, "modifying" is to be intended from the perspective of the final nature of the result of the action, not from the perspective of the final nature of the object on which the action is exercised. The "modifying relation" is not such because it affects ER, altering its ontological status, but it is "modifying" in respect to the result of the process of knowing, that is R-knowledge. If I see an object through a distorting glass I may casually say that "I see a modified object" without wanting to say that in fact "to see an object through a distorting glass" modifies the *object* in itself. What I'm imprecisely saying is that my wearing those glasses amounts to entertain a "modifying relation" with the object, whose *image* turns out to be modified. In the refinement of D_{14} we shall also take into account this "way of speaking".

Finally, it is worth noticing that a crucial characteristic of our understanding of Anti-$R_{ep.}$ is that it is likely to rest upon a certain interpretation of *the nature of R_e*. We say that, according to Anti-$R_{ep.}$ it is *the epistemic relation* between HKS and ER that does not allow a perfect grasping of the intrinsic nature of ER. And we don't stop here. For when we say that it is the nature of R_e that prompts the sort of "opacity" of human knowledge on the account of which the received image of external reality is not truly representative of what ER is in itself, what we really mean is that it is what constitutes the *conditio sine qua non* of R_e to be such as not to make possible HKS' perfect objective R-knowledge of the intrinsic nature of ER. And by the *conditio sine qua non* of R_e we have in mind the *conditio sine qua non* on the HKS' side, or insofar as HKS' role in $R_{ep.}$ is concerned, namely *human cognitive processes*. Hence, in describing the claim

of epistemological anti-realism we heavily rely on our understanding of the subjective *conditio sine qua non of the process of knowing* as such as to give rise to a distinction between ER in itself and ER as it is for HKS. This is perfectly in line with the modern tradition, from Descartes to Kant, yet it is important to underline that things may be put differently. Indeed, there might be forms of Anti-$R_{ep.}$ arguing in terms of a major or minor "disposition" of ER to "enter in contact with" HKS. We may call them *ontological readings of Anti-$R_{ep.}$*. In III.4.b we shall see how a possible Aristotelian or Scholastic solution of the Perpetual Check of Reason can start from a criticism of the limit assumed by Anti-$R_{ep.}$ in focusing only on the epistemic human side of $R_{ep.}$, disregarding the ontological side.[14]

We are now ready to refine the definition of Anti-$R_{ep.}$. What must be preserved is the global significance of D_{14}: it implicitly presents HKS as epistemologically exiled from ER in itself, and therefore as epistemologically relegated within his as-it-is-known-by-HKS ER[15]. In cruder terms, the most important implication of D_{14} is that the world as HKS knows it is just the world as it is for HKS, that such a limit is intrinsic in the nature of human knowledge and that there is no way of arriving at a vision of the world in itself as this could be obtained from a God's eye perspective[16]. This sense of being extraneous to the world, together with the previous comments can be expressed by a final, not merely negative definition of Anti-$R_{ep.}$ thus:

---

14) It can be pointed out that there might be *theological* versions of Anti-R_{ep} as well, (cf. the concept of *Deus absconditus* for example in Maritain [1959]), although, when ER is substituted by a Divinity then it is also generally presupposed that such a Divinity somehow desire to reveal him/herself to human beings.

15) Note that this is true only for the epistemological relation with ER. As we shall see more carefully in the last section when HKS eats an apple what he is eating is a piece of reality in itself, not just his modified known piece of ER as it is for him (which is all he can *know* he is eating).

16) This theistic reference to God's eye in this context is more than an epistemological *facons de parler*, cf. Westphal [1968] section I ('Kant's Theism and the Thing in Itself').

D_{15}) Anti-R_{ep}. $=_{def.}$ the philosophical position according to which (i) *human cognitive processes* (i.e. the subjective *conditio sine qua non* for there being something an epistemic relation between HKS and ER) are such as to make possible only a *modifying epistemological relation* R_e between HKS and ER; and (ii) R_e, in turn, is such as never to enable HKS to come to grasp epistemologically the intrinsic nature of ER; R_e can provide HKS only with a grasp of ER as this is according to HKS' epistemic perspective.

Given the prerequisite of a non-technical terminology above specified, in D_{15} I've opted in favour of the term "to grasp" and its cognate "grasping". Despite its vagueness, it is a half technical word in epistemology, and thanks to its un-specific nature it can serve (cf. O.E.D. second edition) for any of the following more specific terms, through which any epistemological theory can certainly recognise itself: to assume, to believe, to comprehend, to estimate, to gather, to imagine, to infer, to know, to observe, to perceive, to presume, to realise, to recognise, to think, to understand.

Although D_{15} preserves the same level of generality of D_{14}, it no longer claims that it is the nature of the process of knowing *in general* that is responsible for the impossibility of R_{ep}.; rather, D_{15} stresses *specifically* the nature of R_e, and in R_e stresses the nature of the subjective *conditio sine qua non* of R_e, viz. human cognitive processes. The importance of this shift will be fully manifest in the next chapter.

According to D_{15} what HKS is epistemologically in touch with is different from what ER is in itself. We need now to come back to R_{ont}. as defined by D_6 to see what happesn to it once it is accepted Anti-R_{ep}. as defined by D_{15}.

II.4 ONTOLOGICAL REALISM: A KANTIAN VERSION

I suggested earlier both that a clear understanding of ontological realism dependents on a *partially epistemological formulation of its definition* and that ontological and epistemological forms of realism,

despite their connection, should be still considered independent of each other. There seems to be a contraddiction implicit in these two statements, a contraddiction that would be brought to light by the substitution of $R_{ep.}$ with Anti-$R_{ep.}$. For it appears now that either $R_{ont.}$ should not be formulated on an epistemological basis, or that if it is, then the shift of the epistemological component from realism to anti-realism will bring about the collapse of the whole edifice. Fortunately, things are a bit more complex and allow a way out from the impasse.

One difficulty is easy to remove. The suggestion that there is no alternative to an epistemological definition of ontological realism implies only that *some kind* of epistemological notion has to be employed in the definition of $R_{ont.}$, not that such epistemological notions have to be necessarily *realist*. The fact that we are replacing $R_{ep.}$ by Anti-$R_{ep.}$ does not alter the fact that we can still use Anti-$R_{ep.}$ as an epistemological notion in order to formulate $R_{ont.}$.

A second aspect of the issue is more problematic. In debating the terminological side of the question, someone may wish to rise a more philosophical difficulty: how is it possible to formulate something like $R_{ont.}$ once we have recognized that human knowledge is not good enough to enable us to have a clear grasp of the intrinsic nature of external reality ? Aren't we simply contradicting ourselves in accepting both Anti-$R_{ep.}$ and then $R_{ont.}$? In different form, it is the well known problem of asserting the presence of a *noumenal reality* while endorsing the view that human knowledge concerns only *phenomenal* aspects of it. But then, we can simply adopt a solution similar to that put forward in such case: although we need to invoke some epistemological notions regarding the relation between HKS and ER for an accurate formulation of $R_{ont.}$, nevertheless $R_{ont.}$ is, or must be understood as a *metaphysical hypothesis* about the ontological status of External Reality and not an epistemological hypothesis endorsing a certain

description of ER. This crucial distinction can be better drawn if we refer back to what has been said in I.4.

In I.4 I indicated that, generally speaking, there might be only two ways of presenting $R_{ont.}$ according to an epistemological perspective: we can either suppose that we perfectly *know* that "$R_{ont.}$" or we can suppose to be able to conceive that "$R_{ont.}$". The first alternative presupposes a strong version of $R_{ep.}$, and I said that if we should have given up realism in the epistemological field, the latter option would have been the only left open. After the failure of $R_{in.}$ and the substitution of $R_{ep.}$ by Anti-$R_{ep.}$ we are now in the position of assuming that, we can only *conceive* that "$R_{ont.}$". What is the important difference between *conceiving* and *knowing* that "$R_{ont.}$" ?

There might be uses of "to conceive" according to which there is no difference between the activity of conceiving, thinking or knowing that p^{17}. On the other hand "to conceive" can mean more precisely "to conjecture", "to assume", "to estimate", "to expect", "to presume", "to imagine" "to hypothesize", "to entertain". The term is used here according to this family of meanings. To suppose that we are able to conceive that "$R_{ont.}$" with a certain degree of assent, amounts to claiming that we are able to hypothesise that "$R_{ont.}$" on rather justified grounds. In order to formulate $R_{ont.}$ some epistemological notions are still required. The difference is that in this case the reference to the epistemological field does not imply that we also *know* the content of the hypothesis, but only

---

17) Cf. Nagel [1986], chap.6. Nagel's exposition is rather confusing on more than one topic. Particularly, I found his way of speaking of the limits of human capacities of *conceiving* (or 'thinking about', seeing that he equates the two expressions) an independent, unknown external reality, rather misleading. Unless we assume a restricted sense of 'to conceive' (say, for example, 'the activity of thinking about x ending with a perfect grasping of the nature of x'), it is not clear in what sense Nagel speaks of the impossibility of conceiving an unknowable independent world. Indeed, the whole exposition seems to be in a precarious equilibrium between 'qualitative' and 'quantitative' epistemological anti-realism (for this distinction see above in the text). However, as I interpret him, many other points of this chapter find an echo in his position, basically a sort of Kantian approach.

that we are able to capture a meaningful formulation of it. And this latter goal can be achieved even by e.g. a merely analogical procedure[18].

If now we recall the definition of $R_{ont.}$ we can see that there is no conflict between:

a) supposing to be entitled to hypothesise that "there is an external reality a portion of which has an intrinsic nature independent of human acknowledgment"; and

b) the fact that eventually "the nature of human knowledge (which includes also human "acknowledgment") may be such as not to allow an insight into the intrinsic nature of ER".

Although we have been able to reformulate Anti-$R_{ep.}$ in more positive terms than the mere denial of D_9, yet the acceptance of Anti-$R_{ep.}$ as defined by D_{14} forces $R_{ont.}$ to speak only in mere negative terms of the possibility of an external reality with an intrinsic existence and properties. As we ascend the levels of knowledge, the penultimate step, that of the epistemological anti-realist, may be formulated positively in terms of a description of a certain state of affairs, but the last step, that of a minimal ontological realism, can only be formulated negatively; there is an unbridgeable gulf between HKS and ER, and we can conceive only one side of the knowledge-bridge, that strongly based on Anti-$R_{ep.}$. Its formulation must be necessarely negative, to the effect that $R_{ont.}$ can only speak of "the other side of the bridge" as an _unknown_ ER in itself, epistemically _unreachable_ by HKS.

I shall return to this issue shortly (section 5.a), but for now I will just say that, given Anti-$R_{ep.}$, $R_{ont.}$ is limited to support the existence of an independent ER in the guise of a metaphysical hypothesis about a factual possibility. $R_{ont.}$ is a *metaphysical assumption* which needs some epistemological notions and terminology in order to be formulated. I

---

18) The whole distinction refers to one of "Kant's basic teaching, that we can think [hypothesise] more than we can know" (Westphal [1968], p.126). See also chapter I note 9 for the importance of avoiding considering "existence" a *property* of something.

say "assumption" not because $R_{ont.}$ has to be considered a *petitio principii* lacking all justification, but in order to stress that, according to $R_{ont.}$, not only do we suspect that there may be a portion of external reality which has a nature independent of our human acknowledgment, but that we are supposed to be fully convinced of it. We have just seen that this is possible without entering into contradiction with the limited potentiality of human knowledge sketched by Anti-$R_{ep.}$.

Given the fact that it is still meaningful to speak of $R_{ont.}$ even if we are holding some version of Anti-$R_{ep.}$, we may proceed by distinguishing two ways in which the intrinsic nature of ER may be unknowable by human knowing subjects.

Let me first stress that Anti-$R_{ep.}$ does not assert that "'ER' is unknowable in itself", but that "'ER in itself' is unknowable". The "unknowability" of ER does not belong to the nature of ER in itself, that is it is not a property of ER independently of human knowing subjects. It is only a way of representing the result of the failure of human cognitive processes to grasp the intrinsic nature of ER. It is important to keep this distinction in mind, for otherwise the unknowability of the intrinsic properties of ER in itself seems once again plainly contradictory, or at any rate in need of an exception, namely that all the intrinsic properties of ER are unknowable but this very peculiar property, that of having an unknowable nature. We attribute the property of being unknowable directly to ER in itself just as as a *facons de parler*. The "unknowability" of ER belongs to the epistemological domain of HKS'knowledge, as something that is merely thinkable as existent, not to the ontological domain of ER's intrinsic nature.

Once this is borne in mind, then the failure of human knowledge to grasp the intrinsic nature of ER may be seen as due either to the quantitative or to the qualitative limits of human knowledge. It may be

either the case that HKS fails to grasp the intrinsic nature of ER because at the historical time t_x he has an insufficient knowledge of the intrinsic nature of ER; or that, no matter how far HKS' knowledge goes, and therefore how highly cumulative human knowledge is supposed to be, a HKS will never be able to grasp the intrinsic nature of ER, not even partially. In the first case we may assume that the intrinsic nature of ER is like a virgin territory that *still* needs to be explored, that is in fact *potentially* knowable, and that eventually is *already*, partially known. There may be different degrees in which the intrinsic nature of ER is *not yet* known, but this is only because of contingent human cognitive faults or limits, and both of them could be progressively surpassed. From an optimistic perspective the problem of a full grasp of the intrinsic nature of ER could be reduced to just a matter of time, whereas from a relatively more pessimistic one it would become a matter of an ideal tendency: there is no end to the search, and despite the fact that we are actually advancing in the territory, the exploration has only an ideal limit. Either rectified or not by this last Peircean[19] *proviso*, this is the way in which Strawson, for example, presents his version of Kantian empirical realism[20]. I believe that the label "quantitative version of Kantian realism" captures the essential core of this position. A quantitative version of Kantian realism is characterized by the use of temporal qualifiers like "already", "not yet", and "still" as correctives in the description of the actual relation between human knowledge and the intrinsic nature of reality.

The second option is far more radical, and it is the one which is relevant to the formulation of the TD. Let me call it, in correspondence with "quantitative version" a *qualitative* version of Kantian realism. To illustrate the difference between quantitative and qualitative versions of

---

19) The ideal conception of a final true description of the world is spread all through Peirce's work. Cf. for a clear statement of it in terms of a possible version of Kantism ˙Peirce [1871], section 2.
20) Cf. Strawson [1966] and [1979]. For a critical discussion, cf. again Nagel [1986], pp.99-105.

Kantian realism we may imagine ER as a geometric three-dimensional solid, and HKS as a cartootwo dimensional figure living on its surface. He lives in a two-dimensional world and can only experience all objects in so far as they enter into his own two-dimensional space. Though he can walk on the surfaces of the solid and can explore as much surface as he wants he will never discover what there is under it. There is a third dimensional world whose existence he can only presuppose, whose real nature shall remain forever unknowable to him[21]. For a qualitative version of Kantian realism the unknowability of ER is a matter of qualitative structure of human cognitive processes, and the problem is not with the intrinsic nature of that portion of ER we haven't already come across, but mainly with what we have already "encountered" in everyday life. Qualitative Kantian realism supposes that there is a constitutionally unfillable gap between what HKS knows of ER and the intrinsic nature of ER.

The qualitative version of Kantian realism not only is much more problematic than the quantitative, it is also more interesting and the one relevant to the present context. We have presupposed the breakdown of $R_{in.}$ in order to proceed towards a more detailed formulation of the Traumati Doubt. Now what we are interested in is the possibility that our knowledge of that portion of ER we are already acquainted with, may in fact present us with a picture of ER rather different from what ER is in itself, and that this may happen inevitably. The readiness to entertain the Traumatic Doubt reflects a strong pessimistic view about the possibility for human knowledge to grasp the intrinsic nature of ER, and this is Anti-$R_{ep.}$ as it is interpreted by a qualitative version of Kantian realism. A qualitative reading of Anti-$R_{ep.}$ leads us to endorse the view that HKS is presented only with a product of the process of knowing whose nature has been also, if not essentially, constituted by the epistemic relation R_e itself, and

---

21) It must be remembered, that all this speaking in terms of spatial metaphors not only is close to the Kantian fashion (see Strawson's criticism in [1966]) but it also put a significative stress on the importance of the elements of the transcendental aesthetics that make empirical experience possible, space and time.

that human cognitive processes establish only a modifying epistemic relation between HKS and ER. A direct consequence of accepting the hypothesis that R_e is a modifying relation between HKS and ER on the account of the modifying nature of the subjective *conditio sine qua non* of the P-knowing, is the attribution to human cognitive processes of a *constitutive function* in regard to the nature of the product of the process of knowing. According to a qualitative version of Kantian realism, the nature and the contents of R-knowledge are constituted by the modifying activity of the subjective *conditio sine qua non* of R_e, and can be seen as standing, like a clouded glass, between HKS and ER.[22] The precise extent of "opacity" can be left unspecified, provided that it is ample enough to justify the conjecture that reality in iteself is different from reality as it is known by HKS ("ER in itself $\neq$ known ER").

From an ontological point of view both versions imply a form of dualism. The former, between the portion of ER which has been already known and the portion of ER which has not yet been known, the latter between what can be known of ER and what cannot be, that is between ER in itself and ER as it is for HKS. Only this latter can be considered to be the proper component of the TD, for it is only a qualitative version of Anti-Rep. that, without necessarily endorsing a radical ontological separation between ER in itself and ER as it is known by HKS (as if there were two actual distinct worlds), depicts the whole ER as having a twofold nature: noumenal and phenomenal[23].

Introducing this terminology takes us into the field of Kantian scholarship[24]. Since I have committed myself to using the expression

22) The 'dark-glass' metaphor can be used provided it is realized that it may be misleading in stressing more on the *selective* than on the *altering* character of R_e.
23) This monistic position is 'regularly emphasized by those sympathetic to Kant's theory', cf. Westphal [1968], note 8, p.120. Kant very often speaks in ambiguous (if not opposite) terms, of *noumenal* and *phenomenal* objects, or of a *noumenal* world and a *phenomenal* world (cf. for an indication of these passages Westphal [1968], pp.120-1 and footnotes). For a very clear statement of a monistic interpretation cf. Priest [1987a], p.110-1.
24) It is enough to consider that the Kantian Lexicon (Eisler [1971]) contains more than two pages of Kantian quotations under the entrance 'Noumenon'. Many problem with the Kantian terminology and the consequent conceptual distinctions seem to be reducible to the problem

"version of Kantian realism", instead of the more direct "Kantian realism", in the following section I shall focus only on those aspects of the "noumenon"-issue that are essential for the purposes of section 6. It is because I found the content of it close enough to what Kant says that I've not adopted the solution of labeling the position so delineated "Pseudo-Kantian"[25]. This option, however, is left open to those who should feel less confident on such association.

II.5 ONTOLOGICAL REALISM: MINIMAL ONTOLOGICAL REALISM

In order to make possible a precise use of the term "noumenon" and of the conceptual distinction that it brings with it, certain aspects of the noumenon-issue deserve some specifications. These will introduce an additional modification of the definition of Ontological Realism once Anti-R_{ep}. has been taken on board.

First, the Kantian distinction noumenon/phenomenon presupposes that by referring to the unknowable ER in itself by means of the term "noumenon", we are not in fact somehow in a contradictory manner determining the nature of ER in itself, despite the limits of our knowledge. "Noumenon" is like a label for a variable we don't know the value of, and as after having called the variable "x" we haven't said very much about it, so the intrinsic nature of ER is not grasped epistemologically any better because we define it "noumenal". "Noumenon" is a limiting-concept, a purely negative expression to refer to what remains

already seen in the previous chapter, namely to the twofold nature of ontological realism, which never goes disjointed by its epistemological aspects. More specifically, in Kant one of the main problem is that the theoretical value of "noumenon" has both an ontological and epistemological sides, cf. Meerbote [1974], p.166. As for the wide range of scholarly interpretations, cf. beside the works quoted by Westphal [1968], pp.120-1 and footnotes, the classic Kemp Smith [1923], pp.404-424, Schrader [1949], Graubau [1963], the articles by Krausser, Meerbote and Rescher in Beck [1974], Strawson [1975], part IV and his criticism by Srzednicki [1984], to which I would subscribe, Hintikka [1974], and Hartnack [1987].
25) Two more scholarly discussions of the following issues which I'm very sympathetic to are Westphal [1968] and Rescher [1974].

unknown to HKS. The Greek origin of the term ("noeisthai" means "the objects of the Nous", "what is thinkable"), associates its semantical value to that of "speculation". We define as "noumenon" or "noumena" only that which is a matter of speculation, or better of a conceivable hypothesis.

Secondly, the possibility of a plural form of the term, noumenon/noumena, may let someone think that if the "knowable ER for us" is interpretable as a set of phenomena or phenomenal objects, similarly the "unknowable ER in itself" can be thought of as a set of noumena, or noumenal objects. I believe that there are good reasons not to share such a one-to-one relation between noumena and phenomena, though this step is taken by Kant himself in some places[26]. First of all it is rather problematic to accept the hypothesis that behind each object is lurking its correspondent noumenon, since it would be very easy to draw paradoxical conclusions by working on the divisible number of actual objects. Moreover, a one-to-one interpretation would very easily led us to an overcrowded universe, which being a mere noumenal copy of the actual phenomenal world would not withstand the application of Ockam's razor. Secondly, and in relation to this latter difficulty, the organization of a noumenal ER in noumena appears a plain violation of the limits posed by the epistemological anti-realist position: it already amounts to a step into the domain of the nature of ER in itself. Therefore, I shall use "noumenon" and "noumena" indifferently, to refer globally to an indistinct external reality in itself together with its own unknowable, hypothetical, intrinsic properties.

As for the relation occurring between noumenal and phenomenal external reality, I shall limit myself to stipulate that I will use "noumenal ER" in order to refer to "ER in itself", and that by "ER in itself" I mean the ontological root or basis which makes possible there being something like an "ER for HKS".[27] Phenomenal ER can either be seen as

_____

26) Cf. note 23 above.
27) Cf. Rescher [1974].

the *ontological side* of the result of the epistemic relation between *Noumenal* ER and HKS, that is the *ontological side* of R-knowledge or of what we take the reality to be according to our R-knowledge; or as the *epistemic epiphenomenon* of ER in itself. Then, I shall adopt the following equations:

D_{16}) ER with its intrinsic existence and intrinsic properties $=_{def.}$ ER as it is *in itself* (or *in se* or *an sich*) $=_{def.}$ *Noumenal* ER $=_{def.}$ ER^n;

---

and

D_{17}) ER as it is known by HKS $=_{def.}$ ER as it is for HKS $=_{def.}$ *Phenomenal* ER $=def.$ ER^p.

According to them, the distinction between quantitative and qualitative versions of Kantian realism can be re-expressed as two different interpretations of clause (ii) in D_6. "A portion (greater than null, but not necessarily less than all) of ER has a nature (i.e. existence and properties) independent on human acknowledgment" in the case of a *quantitative version of Kantian realism* is interpreted as meaning that:

(ii.a) "[it is possible to know that] all ER has a nature (i.e. existence and properties) independent of human acknowledgment";

it is only that we don't know yet, at least not completely, what this is. A quantitative version of Kantian realism does not admit a final dualism between ER^n and ER^p;

whereas in the case of a *qualitative version of Kantian realism* the same clause is to be interpreted as meaning:

(ii.b) "[it is possible only to hypothesise that] on the one hand ER^p has a nature (i.e. existence and properties) dependent of human acknowledgment, and on the other hand ER^n has a nature (i.e. existence and properties) independent of human acknowledgment".

Since the general process of acknowledging an indeterminate ER is also partially constitutive of the nature of what is HKS' knowledge of what ER is, then ER is to be distinguished in ER^p and ER^n. The presence of this latter must be hypothesized in order to understand what *phenomenal* ER is a

phenomenon of, that is in order to anchor ontologically what is the result of the modifying activity of the *conditio sine qua non* of R_e (ER^p) to an independent ER (ER^n).[28]

Up to here we have equipped ourselves with a description of the essential conditions according to which D_{15} makes a re-interpretation of ontological realism both possible and necessary. Summarizing all the adjustments in a conclusive redefinition of $R_{ont.}$, we have that:

D_{18}) $R_{ont.} =_{def.}$ the philosophical position according to which (i) there is an external reality, ER; (ii) the portion of ER which enjoys an intrinsic nature (i.e. intrinsic existence and intrinsic properties) independent of human acknowledgment is only conceivable as existent, but it is not knowable (ER^n); (iii) the portion of ER which is knowable is merely phenomenal and in a significant degree its nature depends on the subjective *conditio sine qua non* of the P-knowing (ER^p); and (iv) it is impossible to estimate how different the nature of ER^p is from the nature of ER^n.

According to D_{18} none of the two questions ontological realism has been supposed to deal with can have a definite and positive answer. The An-question (whether or not there is an external reality) is answered hypothetically: we can only presuppose that there is a *noumenal* ER behind the *phenomenal* ER we know. The *Quomodo*-question (if there is, what sort of existence it has) is answered in a negative way, just by saying that eventually the existence of ER^n does not depend on human knowledge. Not only don't we *know* ER^n and at most can we merely *hypothesise* that there is something like ER^n, but we cannot even *conceive* its intrinsic properties and evaluate how far is ER^p from ER^n.

Certainly this is a very meagre version of $R_{ont.}$. I shall refer to it as to the *minimal ontological version of realism* (minimal $R_{ont.}$) for, if we should eliminate the appeal to the existence of a *noumenal* ER, $R_{ont.}$ as defined by D_{18} could simply amount to a version of idealism.

---

28) At this proposal it is possible to paraphrase Peirce ('[Duns Scotus] was separated from nominalism only by the division of an hair', [1871], p.14) by saying that Kant's transcendental idealism is separated from German Classic Idealism only by the division of that subtle hair which is the appeal to the concept of *noumenon*.

II.6 THE CONJUNCTION OF ANTI-$R_{ep.}$ AND MINIMAL $R_{ont.}$: THE PERPETUAL CHECK OF REASON

The necessity of taking into account Anti-$R_{ep.}$ in the definition of $R_{ont.}$ has now led us to the threshold of the formulation of the Traumatic Doubt. Endorsing a definition of $R_{ont.}$ as that given by D_{18} already goes a long way towards motivating the doubt that "reality in itself may be completely different from what we take it to be". According to ([Anti-$R_{ep.}^{D15}$] + [$R_{ont.}^{D18}$]), in so far as ER is ontologically independent of HKS it is also unknowable for HKS (ER^n) and in so far as HKS knows ER, ER is not ontologically independent of HKS (ER^p). The relations between HKS and ER are complicated by the fact that, in all his other activities, lets say when HKS is in any other existential relation [$R_{exist.}$] with ER, HKS must be supposed to be in contact with ER^n and not with ER^p. I've already given the example of eating, but many others can be thought, involving some action done by HKS and affecting some portion of external reality. Consider for example driving one's car. According to ([Anti-$R_{ep.}^{D15}$] + [$R_{ont.}^{D18}$]), when he is driving his car, a HKS is epistemologically in contact with phenomena belonging to ER^p, but what he also handles, and manoeuvres is in itself a portion of ER^n. The puzzling thing is that his knowledge as it aspires to grasp the noumenal reality will always find itself falling short; it will always be "human knowledge" and therefore ER^p.

It will be useful to give a graphic summary of the whole "machine" that constitues the content of the TD. The following pattern will be our basic reference:

THE PERPETUAL CHECK OF REASON

$R_e(D_{15})$

(epistemological level)

HKS

$ER^p(D_{15})$ $ER^n(D_{18})$

$R_{oi}(D_{18})$
$R_{exist.}$
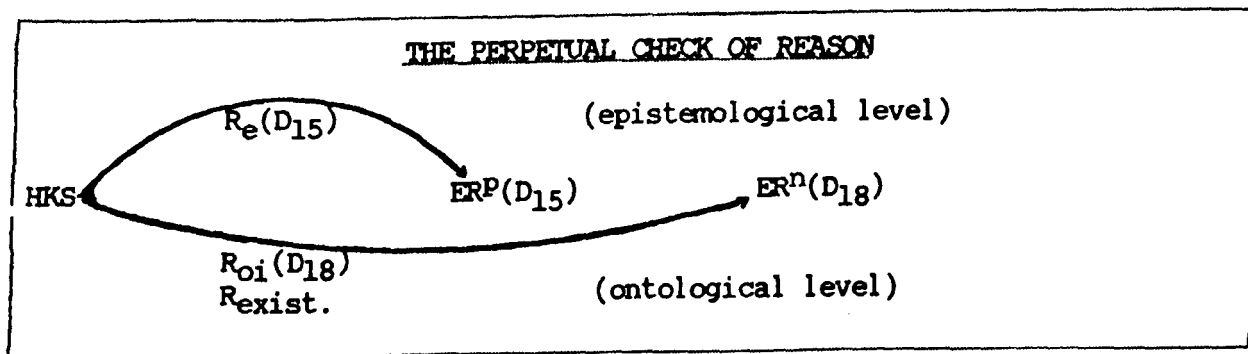
(ontological level)

scheme 4

At the more fundamental, ontological level HKS is fully in contact with ER^n and he may be simply presented as part of it. It is from this perspective that HKS can conceive the gap existing at the epistemological level between ER^p and ER^n. Yet this gap is to remain epistemologically unfillable, for the very nature of R_e is at the same time what produces it and what makes it inevitable. The result is that every time HKS extends R_e in the attempt to grasp ER^n, that is every time HKS tries to advance his knowledge in order to go beyond ER^p, ER^n slips away, and remains ever elusive.

It should be now evident why I've chosen the expression "Perpetual Check of Reason"[29] to label the logical reconstruction of the contents of the Traumatic Doubt. Suppose that the process of knowing is like a chess-game with HKS and ER as the two players. HKS can be interpreted neither as losing nor as winning the game: he does not obtain a full grasp of the intrinsic nature of ER, but he cannot even say how far he is from it, for he cannot tell if ER^p and ER^n are much the same or utterly different. The game is drawn because HKS cannot avoid the situation of "Perpetual Check" in which he himself has put ER. Exactly when he is close to checkmate ER (full grasp of the intrinsic nature of ER) ER makes a further move which impedes the capture of the King (its intrinsic nature). HKS and ER play an infinite sequence of moves, without HKS ever going closer to the end of the game.

A deeper insight into the nature of the Perpetual Check of Reason can be gained by means of a parallel with a mathematical pseudo-paradox.[30]

Suppose we are asked to either accept or refuse the idea that there is at least one possible natural number N which in fact has never been

---

29) "In Chess and other related games a situation in which one player cannot prevent the other from making an unlimited sequence of checking moves (and thus obtaining a draw)." O.E.D., second edition.

30) This paradox is tailored on Berry's Paradox, cf. Russell [1910], book I, p.61: "the least integer not nameable in fewer than nineteen syllabes"; or Black's version: "the least integer not named in this book" in Black [1933], p.98.

thought in the past, is in fact not thought at the present moment and will in fact never been thought in the future. Suppose also that we accept this idea, at a first it seems reasonable to suggest that there is at least one possible natural number in the infinite set of natural numbers, to which apply such a negative description. Do we really *know* at least one example of it ? Since the example is so construed as to make "being in fact never thought" the individuating property of N, and since the foregoing question amounts to a request to mentally formulate N, it is obvious that we cannot give a positive answer. The very act of giving an example is self contradictory. Apparently the striking conclusion is that we are able to think of something like a never-thought possible natural number N, but we are not able to *know* it. The only process through which N can be individuated is also the same process through which the peculiar nature of N is irremediably lost.

The example can even go a bit further than this. For it is possible to give a non-contradictory Russellian definite description of a never-thought N, provided that such a definite description individuates one and only one N without however mentioning it. This can be done in the following way:

i) suppose that all the natural numbers after a certain extension are too big to be in fact ever thought, in the past in the present and in the future;

ii) suppose that a number like x (where x is a specific formulation of one natural number, say for example 1) belongs to this set of never-thought N;

iii) suppose it was in fact a never-thought N and that it would have remained so if we had not thought it now; by thinking it now - just say "1!" - we have promptly excluded it from the set;

iv) suppose now that exactly the same happens for x+2: (for the same value of x): we think "3!" and so we lose it as a good example;

the last step consists in saying that:

v) a possible natural number N which in fact has never been thought in the past, is in fact not thought at the present moment and will in fact never been thought in the future is "the possible natural number N occurring between "1!" and "3!"". This latter is a definite description.

Many features of this pseudo-paradox may throw some light on what I mean by the Perpetual Check of Reason. Exactly what makes it a pseudo-paradox - i.e. a certain amount of mathematical Platonism implicit in the assumption that there are numbers existing independently of the possibility of being thought or formulated by someone - renders it close to the actual situation we face in the noumenon-issue: we are presupposing that there is an ER with intrinsic properties but which no matter what we do will always remain hidden from us.

Suppose that, for the sake of exemplication, we do accept a strong Platonist view about the nature of natural numbers, so that we let ourselves be caught in the paradox. The problem we face is that despite the fact that we are convinced of the external existence of N and we are also able to indicate it in a negative way, as soon as we try to grasp it, to nominate it, we are left with nothing: the object of our search disappears, and we need to move a bit further to reach another natural number which still has the property of being, so to say, formulation-free. In the mathematical example this happens because "to think N" means "to modify the property of N of not being thought". Hence the occurring "modifying relation" is "modifying" in a stronger sense than that assumed above. "Modifying" is to be intended here in respect to its object and not just in respect to its result. This however, can only reinforce the analogy: we have the same feeling of frustration about the noumenal ER and the unknowable N. Such a frustration is worse than the delusion felt because of the disappearing of a mere mirage. For we are left with the conviction that there is an independent external reality (there is a natural number) which has a proper existence and eventually its own intrinsic properties, and yet

we cannot reach it. The same "instrument" we are using to grasp the nature ER^n is such as to nullify our efforts and prevent a positive final result.

Let me now draw the conclusion of this chapter. I've started by saying that I would have followed a step-by-step procedure in order to outline each important stage in the rising of the Traumatic Doubt. In six sections we have travelled through the formulations of the epistemological and the ontological components of the TD. The final result has been that the content of the TD is given by the combination of a form of epistemological anti-realism like Anti-R_{ep}.[D15] with a form of ontological minimal realism like R_{ont}.[D18]. I have re-labelled the complex picture coming out of analysis the Perpetual Check of Reason. Throughout the chapter I've presupposed an implicit acceptance of the Aristotelian Postulate as this has been sketchly described in the General Introduction. There I made clear that, unless we also assume the Aristotelian Postulate, the qualitative version of Kantian realism is not yet sufficient to produce that unpalatable impression of displacement that we take for granted when we understand the Doubt qua Traumatic. It is only by assuming the intellectualist desire for knowledge for its won sake that the Perpetual Check of Reason becomes frustrating: the nature of the subjective *conditio sine qua non* of R_e (human cognitive processes) is such as to lead to a *conflict* between HKS' desire to know the intrinsic nature of ER and the impossibility to satisfy such desire. What I shall argue in the second part of this study is that, following the analogy with chess, a draw in terms of Perpetual Check can be a very good result, if only we could understand that HKS is not playing with the white, but with the black. Out of the analogy, I shall advocate that if knowledge is no longer interpreted as a free spontaneous activity of HKS aimed at the "epistemic possession" of ER, but as a reaction against the presence of ER as something opposing HKS, then the possibility of leaving ER^n outside the wall of our intellectual Troy

should be seen as a great achievement. But this is anticipating too much. For the moment we can simply accept the idea that the Perpetual Check of Reason is a highly negative impasse that any philosophy risks, and as such an unpleasant conclusion that a philosophical doctrine, if possible, would like to avoid. From this perspective ($[\text{Anti-R}_{ep.}{}^{D15}] + [\text{R}_{ont.}{}^{D18}]$) is to be understood as one of the crucial problems of epistemology, such that any respectable theory of knowledge must both determine its position in respect to it and try to escape. This is what we are going to see in the next chapter.

CHAPTER III

METAPHYSICAL AND EPISTEMOLOGICAL STRATEGIES AGAINST THE PERPETUAL CHECK OF

REASON

"Modeste tamen et circumspecto judicio de tantis viris pronuntiandum est"
Quintilian

III.1 INTRODUCTION

In the previous two chapters I have dwelt on the analysis of the TD enough to render its epistemo/ontological contents sufficiently explicit and clear. Time has come now to turn to the third and final stage of the first part of this study, namely a general survey of the main solutions anteposed to the Perpetual Check of Reason. This chapter is organized into five further sections. In section two I will lay down the general map of the principal strategies available against the PCR. The last chapter has ended by showing the ontological consequences of accepting an Anti-realist epistemological position. Thus it is worth starting this chapter by deepening the investigation of the ontological side of the issue a bit further. In section three we shall see what happens to the PCR once interpretations and additional modifications of the ontological component of the PCR challenge the validity of its "minimal ontological realism". Subsequently, alongside the oscillating method adopted in the previous chapters, in section four I will concentrate on the epistemological side of the issue. And obviously a discussion of a possible positive reinterpretation of the PCR is to be left for the fifth section, where it will have the function of introducing the criticism of the Aristotelian

Postulate, which is a similar attempt to give a positive reading of the PCR. In section six I will summarize the principal conclusions of the entire investigation.

There are several reasons that induce me to postpone the discussion of the Aristotelian Postulate untill after a wide survey of the other main attempts to solve the Perpetual Check of Reason. First, the need of a further analysis of the internal logical structure of the Perpetual Check of Reason. This chapter definitely concludes the general discussion of the PCR and provides us with a final, articulated understanding of the nature of the problem. Secondly, the importance of introducing the idea that the PCR can be opposed from more than one side. By dismantling the formulation of the PCR and by showing what criticisms could be made against each step which has been made to construct it, the investigation conducted in this chapter prepares the ground for the second part of the work. Thirdly, and more specifically, two final tasks will be accomplished here: proving that the PCR is of the utmost importance in the history of epistemology - I shall be able to show how different theories of knowledge can be directly re-interpreted as attempts to avoid, solve or dissolve the PCR - and indicating that all the attempts of solution of the PCR (i.e. most of the theories of knowledge), despite their radical differences, have been substantially united by the Aristotelian Postulate, which represents their common, tacit and never challenged assumption.

The chapter is a sort of hinge between the first and the second part of the work. It will lead us from the formulation of the Perpetual Check of Reason to the analysis of the Aristotelian Postulate as one of its main sources.

III.2 THE GENERAL FRAMEWORK

The conclusion of the analysis of the Perpetual Check of Reason in II.6 has been that the acceptance of ($[\text{Anti-}R_{ep.}^{D15}] + [R_{ont.}^{D18}]$) implies the acceptance of a gap (G) occurring between ER^p and ER^n, such that HKS can be only *ontologically* but not *epistemologically* in full contact with the intrinsic nature of ER. The source of the Perpetual Check of Reason turns out to consist in the possibility of there being a difference G between ER as it is in itself and ER as it is for HKS. Only if such a gap is first thought to be possible then is it also possible to endorse its actual presence. In order to be able to wonder that "reality in itself may *be completely different from what we take it to be*" we must have already assumed that "reality in itself *could be completely different from what we take it to be*". All this can be graphically represented by slightly modifying Scheme.4:

THE P.C.R. AND THE GAP BETWEEN ER^p AND ER^n

(epistemological level)

$$(\text{Anti-}R_{ep.}^{D15} + R_{ont.}^{D18}) = \quad HKS \qquad \overset{R_e}{\frown} \qquad ER^p \leftarrow G \rightarrow ER^n$$

$$\underset{R_{oi}}{\smile}$$

(ontological level)

(in this context ($R_{exist.}$) can be dropped)

---
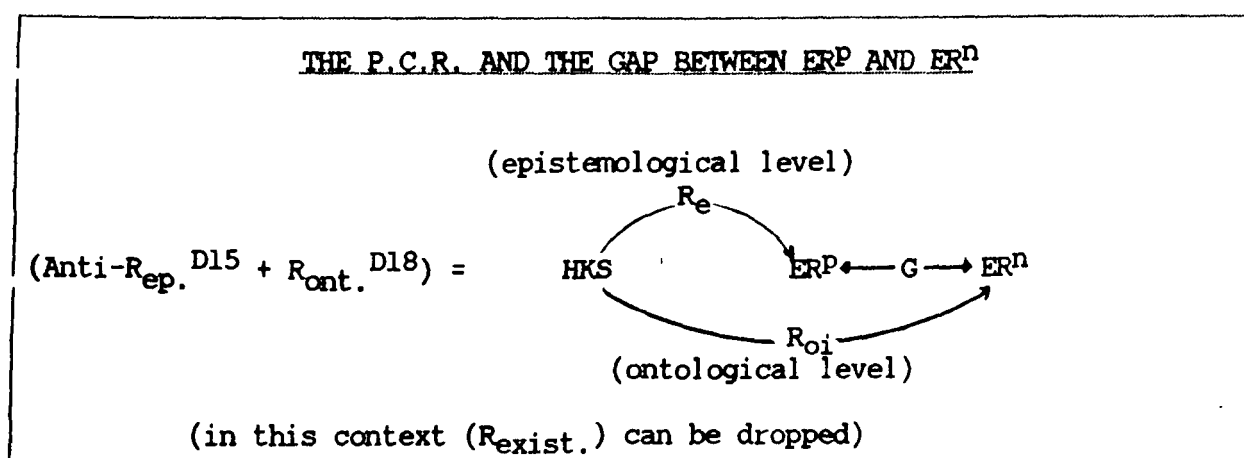
scheme 5

Accordingly, the key-issue for any philosophical theory which would like to avoid the conclusions of the Perpetual Check of Reason turns out to be the presence of the gap G between ER^p and ER^n, and the possibility of avoiding it.

Clearly enough, there may be three different attitudes towards G and so three fundamental strategies against the Perpetual Check of Reason. G may be seen as either avoidable or as unavoidable. In the former case G can be seen avoidable in two principal ways, in so far as it is due to a particular (but according to the theories which endorse this kind of strategy against the Perpetual Check of Reason we should say "wrong") interpretation of R_e or of R_{oi}. However the elimination is conducted, a modification of R_e or of R_{oi} must necessarily lead to the institution of (the possibility of) both an ontological and an epistemological "full contact" between HKS and ER. In the latter case, that is if G is thought to

be *unavoidable*, then a different re-interpretation of it may be attempted. Since in this context I don't mean to deal with the Aristotelian Postulate, I will assume that any philosophical theory would try either to *eliminate G* ontologically or epistemologically, or to *diminishes* its *significance* as much as possible. Only the anthropological strategy will attempt a radical *re-interpretation of G* in positive terms, but we shall see this in the second part of the work.

The first strategy starts from the possibility of eliminating G by means of a revision of the ontological source of the gap. Briefly, the idea in this case is that since G is caused by the presence of an ontological independence between knower and known (R_{oi}(ER,HKS)) as interpreted by R_{ont}.[D18], then G could be removed, and the PCR would be avoided, as soon as we dispose of the dualism between ER^p and ER^n due to the relation R_{oi}. As we will see, this strategy can be properly called *metaphysical*, and it may consist in three different versions of *Idealism*, Plato's, Berkeley's and Hegel's. For in order to support the hypothesis that there is no gap between ER^p and ER^n we may modify R_{oi}(ER,HKS) so as to:

a) eliminate the presupposition that HKS is primarily related with ER (Plato's Idealism); or

b) eliminate ER (Berkeley's Idealism); or

c) eliminate the presupposition that there is an uncrossable and unresolvable distinction and therefore any fixed, *external* relation between ER and HKS (Hegel's Idealism).

The second strategy considers the presence of G to be caused by the presence of the process of knowing (i.e. R_e (HKS, ER)) as this is interpreted by Anti-R_{ep}.[D15]. Therefore it will concern the possibility of eliminating G, hence of solving the Perpetual Check of Reason, by modifying some aspects of R_e (HKS, ER). This strategy can be properly called *epistemological*, and it consists in reconciling the process of knowing with

the possibility of grasping the intrinsic nature of ER, in such a way as to eliminate the epistemological dualism between ER^p and ER^n. In order to avoid the dualist conclusion that the product of the process of knowing (i.e. R-knowledge) is such as to present to HKS an ER^p which is different from ER^n it is possible to vindicate three general forms of epistemological realism. For it is possible to hold that there isn't any G occurring between ER^p and ER^n:

a) because the nature of the *subjective conditio sine qua non* of P-knowing, i.e. the nature of human cognitive processes, is such as to put HKS in direct contact with the nature of ER; or

b) because the nature of the *ontic conditio sine qua non* of P-knowing, i.e. the nature of the influence of ER on HKS (cf. end of II.3) is such as to present HKS with the intrinsic nature of ER; or

c) because there is a third element, extraneous to P-knowing, that guarantees that in fact ($ER^p = ER^n$).

According to (a) and (b) G is eliminated because ER^p is epistemologically equivalent to ER^n, according to (c) G is eliminated because a third element, different from ER^p and ER^n, guarantees that they are equivalent.

The *third strategy* is that which presents the most disparate solutions. From an abstract point of view, once the limits of human objective knowledge have been recognized as unavoidable, there might be two kinds of interpretation of G. The first interpretation of G is "positive": the basic idea is that of trying to revalue the epistemic limits shown by human objective knowledge, against the sceptical attitude. This task is accomplished by finding a possible role that such limits may positively play within a context wider than that generated by the aim of knowing the intrinsic nature of ER. I shall mention two principal proposals under this alternative: Kant's regulative use of Reason and Vico's commendation in favour of historical knowledge (the "verum ipsum factum").

There can be two addresses for a "negative" interpretation of the PCR. On one hand it may be thought that the dualism between ER^p and ER^n proves strongly enough that there is nothing positive in human knowledge *tout court*. Eventually this alternative leads to the formulation of various versions of *scepticism*. On the other hand it may be thought that the same limits make clear that at least *human objective knowledge* must be replaced by some other kind of knowledge. Again, eventually this position leads to *irrationalism*, where by "irrationalism" is to be intended both "a-rationalism" and "anti-rationalism". According to one or the other of these two senses, a philosopher will either urge us to *overcome* the limits of our objective knowledge in order to acquire a more fundamental, and *supplementary intuition* of the intrinsic nature of reality, or he will invite us to *refuse* our objective knowledge in favour of an *alternative* epistemic access to the same reality.

Since some version of *irrationalism* can still amount to a real attempt to avoid the Perpetual Check of Reason, only the first negative interpretation leading to the formulation of a sceptical view is generally considered the deleterious face of the Traumatic Doubt, as if the acceptance of the PCR necessarily implied a radical form of scepticism. Because the negative interpretations of the PCR are the consequences of the first and most direct attitude towards the Traumatic Doubt, I will refer to the positive interpretations of it as re-interpretations or "revaluations" of the significance of the PCR and discuss them in the end.

Before I begin the examination of the strategies against the PCR, I need to specify the several limits within which I will lead my investigation. The distinctions I shall draw represent a very schematic way of putting the issue. In fact the three basic strategies listed above are by no means necessarily alternative or even so clearly distinguished in different philosophers. It is important that the possibility of alternative

interconnections is borne in mind in order not to undervalue the deep complexity of the actual answers that have been provided in the course of the history of philosophy. I stress this aspect here because in what follows I shall disregard any global perspective by assuming a more restricted approach. On the one hand, I focus just on each of the three possible manoeuvres, leaving to the taste of the reader to arrange any eventual conjunction of them in broader strategies. And on the other hand I will also be able to tackle only the main aspects of the topic in a very summary way, presenting just, the bare outlines of possible solutions to the PCR. Clearly, in discussing the different solutions of the Perpetual Check of Reason I will draw a sort of development of epistemological theories only strictly in respect to the Traumatic Doubt. This means that on many other points, all extremely important for the history of epistemology, the exposition, when not lacking any reference at all, will be necessarily insufficient. Some of the central theoretical issues I won't be able to take into account are: the distinction between ilomorphic, iconic and propositional models of knowledge; the distinction between knowledge how, that, of, about, by acquaintance; the characterization of knowledge before and after Ockam (knowledge of universals and knowledge of particulars), before and after Descartes (knowledge of something and representative knowledge) and before and after Wittgenstein (representative-mental knowledge and propositional-linguistic knowledge). The situation is not different on the historical side, which will also suffer severe restrictions. Since the investigation concerns mainly the logical nature of possible solutions of the PCR I will quote authors and philosophical theories solely to indicate some eminent places where I believe it is possible to recognize similar (if not identical) positions. By such a cursory approach I don't mean to reduce authors and philosophical theories to simplified schemes. I will largely disregard the scholarly aspects of the theories or authors I will quote, both for reasons of limits and of

opportunity. Personally I'm satisfied by the way I've matched the logic and the history of the issue, but those who feel uneasy about that may adopt the device of relabelling "Hegel's theory" as "H-theory", "Kant's position" as "K-position" and so on. I wouldn't mind doing this in the exposition, if it were not that in this way the chapter would lose too much in terms of readability, and on the other hand it would not acquire enough in appropriateness to justify this further increment of an already difficult paraphernalia of definitions and abbreviations. I also won't state the criticisms that could be moved to each solution of the PCR. Such a restriction is justified not only by the fact that this is not the proper place for a history of epistemology nor would there be space enough for such a lengthy discussion; it is also motivated by the additional and essential fact that, although I'm proposing it as a new solution of the Perpetual Check of Reason, I'd like to present the criticism of the Aristotelian Postulate as only one alternative among others, and as such, as a solution that eventually could be associated and interlocked with previous solutions.

These are the limits of the exposition that should be kept in mind while reading this chapter. I thought that the quotation from Quintilian stated the point as clearly as I wished.

III.3 THE METAPHYSICAL STRATEGY: IDEALISMS

The metaphysical strategy consists essentially in making the notion of an external reality existing in itself, independently of any previous or further spiritual, mental or logical factor, empty. If the independent existence of the second element related by R_{oi}, i.e. of ER, disappears, then there won't be any further problems about a gap between reality in itself and reality as it is known by HKS. A metaphysical refusal of the

Perpetual Check of Reason operates by accepting the clause that there is an external reality HKS is in contact with, while rejecting the second, anti-humanist clause, this being in terms either of mind/s-independence or of acknowledgment-independence. It is for this reason that a metaphysical strategy is also essentially *idealist*: in terms of $R_{ont.}$ its proposal amounts to accepting the same positive answer given by the realist to the An-question yet modifying in different ways the answer to the *Quomodo*-question.

As I've already mentioned, there are three main ways whereby the idealist requirement about (ii), that is about a *somehow*-dependently existent reality, can be fulfilled. The first possibility consists in maintaining the distinction between ER^p and ER^n, but inverting their "positions" in respect to HKS. The second consists in eliminating ER reducing all that is real to the existence of HKS and of mental activity. The last possibility consists in eliminating the presupposition that there are something like two distinct elements HKS and ER related by something else like R_{oi} or R_e as *external relations*.

III.3.a IDEALISM: PLATO'S STRATEGY

In very crude terms, one of the possible ways of understanding the presence of G is to interpret it as due to the presence of a "more real" reality (ER^n) behind the reality which *appears* to HKS (ER^p). If the distinction between ER^p and ER^n must be kept, a possible solution in order to avoid the disruptive consequences of the presence of G may be that of inverting the positions of ER^p and ER^n in respect to HKS. This inversion of places is obtainable by means of the assumption of a noumenal world ER^n which is at the same time:

(i) (ontologically) the *ontological* matrix of external reality within which HKS lives his life (i.e. ER^p); and

(ii) (epistemologically) already cognitively mastered by HKS.

If HKS has been fully in contact with ER^n and external reality ER^p is merely a copy of it, then G assumes a completely different value: the gap no longer occurs between ER^p as it is known by HKS and ER^n which is unknowable, but between a perfect, immutable reality which is known by HKS (a *Platonist* ER^n) and its concrete, empirical "realization", only approximately "real" (a *Platonist* world of appearances or ER^p) and as such only approximately knowable. In other words, HKS is supposed to have been in contact with the ontological matrix of external reality, and whatever in external reality is different from the picture HKS has of it, it is a "fault" of external reality itself, which is imperfect, incomplete or second-rate. It follows that there is nothing wrong in trying to convince the man of the street that reality in itself is different from what he believes it to be, for in fact the Reality is only noumenal, and it is that Reality we either *recollect* in our minds, or partially recognize as operating in the world as its paradigm.

Historically, I suspect that the significant change ("change" in respect to our present perspective) in the positions of ER^p and ER^n in regard to HKS had the fundamental consequence of relegating to the Heaven the perfection and precision of mathematics and logic for centuries (cf. Koyre's ingenious essay [1948]). It was only with the second half of the XVI century, the technological developments (measures of space and time by means of instruments) in connection with a new cultural atmosphere (employment of these measures and of calculations) that ER^n started disappearing from the horizon of what was already known or at least knowable by HKS, and ER^p kept approaching HKS as what HKS was really in contact with. If this theoretical movement by which ER^p ends by being the first and unique epistemological environment within which HKS leads his

mental life begun with Descartes, it was with Kant that it had its final recognition.

Since the Platonist solution shifts ER^n closer to HKS and ER^p in the place where ER^n was according to the PCR, the Platonist strategy can be graphically[1] interpreted as modifying Scheme.5 thus:
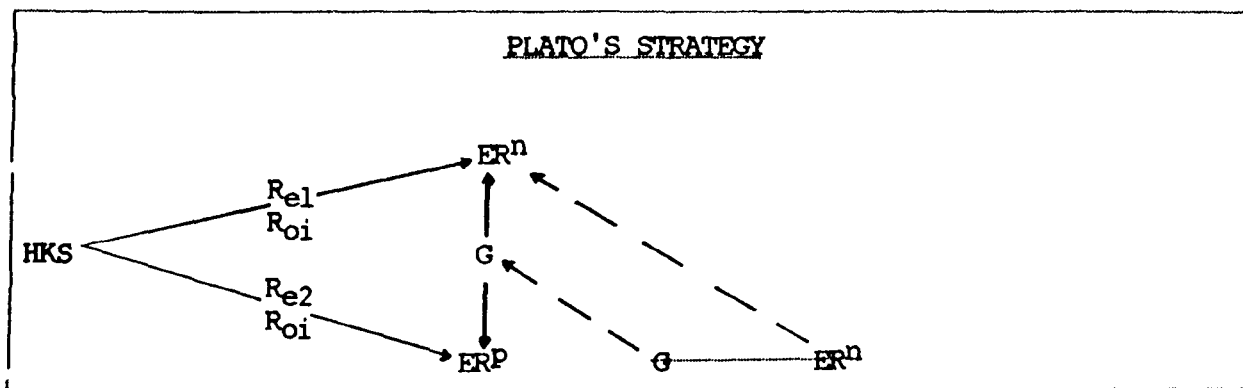
scheme 6

The scheme shows that:

i) the relation between ER^n and ER^p is such that the former is no longer logically "behind" but "before" the latter, and the nature of ER^p is to be understood as phenomenal not only in an epistemological sense, but also ontologically, ER^p being just a copy or a shadow of ER^n;

ii) the relation between HKS and ER^p is similar to that presupposed by the PCR: ER^p may still be in a relation of ontological independence of HKS' acknowledgment; and HKS may have only a partial knowledge of ER^p. The main difference is in the relation between HKS and ER^n, for

iii) the relation between HKS and ER^n is such that ER^n is ontologically independent of HKS' knowledge, but HKS has an epistemically privileged access (whatever this may be, say recollection, knowledge by acquaintance, intuition etc.) to its intrinsic nature. This explains the need to distinguish between R_{e1} and R_{e2}. However R_{e1} is conceived, HKS is in harmony with ER^n.

But then, isn't this form of Platonism just an epistemological solution of the Perpetual Check of Reason, and as such, shouldn't it be

_____

1) This graphic representation of Plato's strategy can be see as a re-interpretation of his "theory of the line", cf. *Republic* VI, 508a-511e.

discussed in the next section ? The question is due to the obvious key-role played in (iii) by the epistemically privileged access, and yet it relies on a misunderstanding. As I've had occasion to repeat more than once in chapter II, any position about the realism-debate cannot be purely ontological, but only *mainly* or *basically* ontological. And this seems to be the case with Plato's Idealism, where it is the ontological device which is the central issue[2]. The epistemological relation between HKS and ER^n assumes a central role only after the substitution of the positions of ER^n and ER^p has been conceived. And this manoeuvre is possible only owing to an ontological hypothesis, viz. that working in terms of matrix and copy. I shall briefly turn to the Platonist privileged access to ER^n in section III.4.a. For the moment, it will be sufficient to say that Neoplatonic versions of this strategy will more and more stress the *ontological* importance of the speculative process of "stepping back" or "ascensio" towards the source of the phenomenal multitudes of our world. Cognitively, man is supposed to go back to the matrix of the universe by going "backwards" through all those phases that the development of Being has graduallly passed through going "onwards".

III.3.b IDEALISM: BERKELEY'S STRATEGY

The second alternative we have at hand is probably the most direct: we may consider the gap G occurring between ER^p and ER^n as depending on the erroneous presupposition that there is something like ER existing independently of HKS. The hypothesis may run something like this:

---

2) A similar but opposite discourse is valid for the Aristotelian distinction between matter and form: I would interpret this ontological strategy as depending on the epistemological solution of the PCR in terms of activity of ER on HKS' *intellectus passivus* or *tabula rasa*. This is the reason why I list Aristotle's strategy among those epistemological, in section 3. Needles to remind that all this speaking about *logical priority* between epistemology and ontology in these or other authors is strictly depending on the perspective assumed in this context.

a) as long as we assume a *dualism* between knower and known, between knowing activity on one side and known object on the other, it will be always possible

a.i) to suspect that the two elements don't coincide, for there is no form of dualism that doesn't open the way to pluralism; and therefore

a.ii) to imply that the result of the knowing activity is somehow, yet seriously, different from what the known object is in itself; but,

b) if this dualism should turn out to be ill grounded, if it would be possible to replace it by a strong form of *monism* according to which, at the end of the day external reality can be reduced to some mental product, then

c) we would have eliminated the possibility of the presence of G, and a *fortiori* we would have established the vanity of the Traumatic Doubt.

Hence an *idealist*[3] solution of the PCR may be obtained by simply disposing of the central assumption of R_{oi}, for there is no such problem as that caused by the presence of G - i.e. there is no room for the Traumatic Doubt - if there is no such thing as an *independent reality* ER. Since the solution still accepts the first clause of $R_{ont.}$, i.e. that there is an *external reality*, it may be reinterpreted as compressing ER^n onto ER^p. And since ER^p doesn't have an existence independent of HKS' epistemic activity, the relation R_{oi} is made equal to R_e. It is easy to recognize a version of Berkeley's Idealism in this strategy[4]. Schematically we have that:

---

3) Apparently, it is easier to elaborate an idealist version of monism which stands up, than a physicalist or materialist equivalent, perhaps because the former has the only limit of its internal coherence, while the latter, if it wants to appear credible, must deal with the empirical evidence that there are human beings whose mental life can be hardly reduced to pure matter without some residue. By way of aside let me suggest that Aristotle's hypothesis about the *intellectus passivus* affected by external reality may *partially* represent a "materialist" counter-part of Berkeley's all-mental world.

4) Since Berkeley's project is to confront Locke's "extreme" empiricism, he ends by sharing with Locke the same Aristotelian-Thomistic assumption whereby any knowledge has its source in perception ("nihil est in intellectu quod prius non fuerit in sensu") to the effect that his main concern is with a perception-less ("un-perceived") external reality, which is only a special case of the acknowledgement-less external reality seen in D_6. For the importance of the more ample perspective introduced by a formulation in terms of "acknowledgement" (as this has been technically used in this context) instead of the more limited "perception" cf. for example the Platonist approach of Leibniz [1765], books 1 and 2 (especially the concept of innatenes).

BERKELEY'S STRATEGY

(ontological level) = (epistemological level)

$$R_{oi} = R_e$$

$$(R_{ep.} + \text{Anti-}R_{ont.}) \quad HKS \qquad ER^p = ER^n \leftarrow -G - -ER^n$$

(ontological level) $\qquad\qquad R_{oi}$
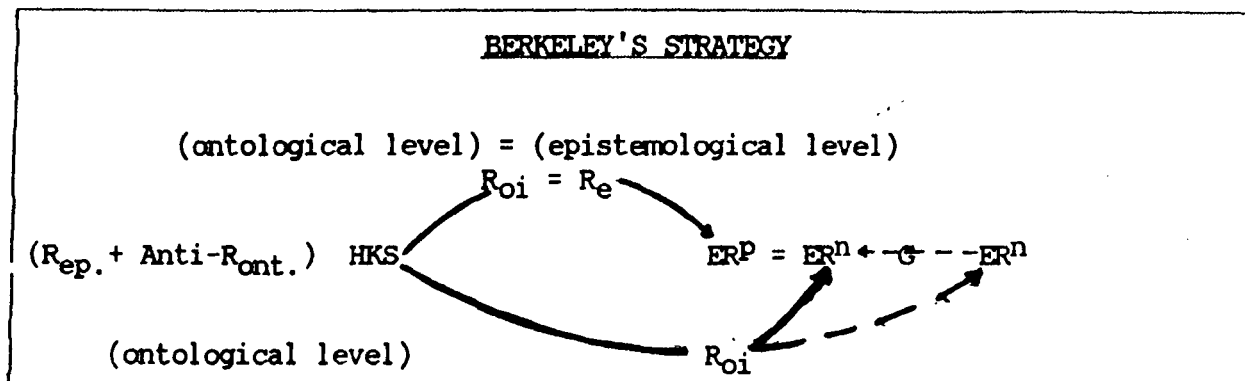
scheme 7

In *The Principles of Human Knowledge* (paragraph 87) Berkeley expresses the central issue of his work in a way strikingly similar to that used here to formulate the PCR:

"Things remaining the same, our ideas vary, and which of them, or even whether any of them at all, represent the true quality really existing in the thing, it is out of our reach to determine. So that, for ought we know [...] may be only phantoms and vain chimeras, and not at all agree with the real things, existing in *rerum natura* [see next chapter for the importance of this 'natura' in classic philosophy]. All this follows from our supposing a difference between things and ideas, and that the former have a subsistence without the mind, or unperceived."

To the English reader Berkeley's idealism is certainly the most well known of the three idealisms exposed in this section - even if it has been considered more as a polemic reference than as an interesting or fruitful theory in itself - and therefore it is not necessary to spend too much time in presenting his solution. Let me just cast some light on two features which are most relevant this context.

First, it will be remembered that this is the second time we have encountered Berkeley's idealism, for he has already been quoted in the introduction of the previous chapter (cf. II.1.C). There I said that the possibility of conjoining a version of epistemological realism with a version of ontological anti-realism[5] could be presented as a possible solution of the PCR. Now Scheme 7 above makes explicit this possibility, by

---

5) By way of aside it is worth noticing that, because Berkeley's theory presents the existence of the world as depending on a continuous activity of God's Mind one of the crucial problem that Berkeley saw as relevant to his theory was the correspondent undervaluation of the nature of miracles (where by 'miracle' is generally understood the exceptional intervention of a Divinity into the affairs of the physical world). Obviously the issue can be hardly seen as an interesting problem nowadays, and yet its vital importance for Berkeley should not be undervalued. In fact, Berkeley discusses it as the second theological objection in paragraph 84 and interestingly enough he fails to answer it.

substituting (Anti-$R_{ep.}^{D15}$ + $R_{ont.}^{D18}$) of Scheme 5 with ($R_{ep.}$ + Anti-$R_{ont.}$).

Secondly, Berkeley argues that his theory precludes scepticism by removing its very basic assumption: that there are things independent of the mind, and of which HKS' knowledge can give a poor representation[6]. In Berkeley ER is the result of the interplay between God's and man's minds so that the intrinsic nature of it is simply mental and cannot escape man's full comprehension. In order to re-establish our confidence in $R_{ep.}$ Berkeley proposes to shift the negation (ANTI-) from $R_{ep.}$ to $R_{ont.}$. Then the Berkeleian strategy may be interpreted as prompted by that conjunction of the PCR with a *sceptical* outcome whose possibility I have sketched above, in the first section. Like in Plato's case, also in Berkeley's strategy the *epistemological component* has a very important role but the *ontological solution* is the central point. Although in virtue of this shift Berkeley's *idealism* can really avoid the Perpetual Check of Reason, to the great majority of philosophers it has very often appeared too high a price to pay for epistemological realism, a radical solution that commits an "ontological realist suicide" just in order to avoid the epistemological stabbing of the sceptic.

III.3.c IDEALISM: HEGEL'S STRATEGY

The last possible solution we need to consider under the label "metaphysical" consists in the elimination of the very idea of an external relation between HKS and ER. As far as I understand it, this further hypothesis can be formulated in the following way. The source of the presence of G as essentially problematic does not lie in the nature of ER, or in that of HKS or in any special, further feature of their relation; the

---

6) Cf. paragraphs 85-156, particularly 85-91.

real problem lies in the original, misleading assumption made when we speak of the existence of an external reality and of the possibility of knowing it. This assumption consists of an an uncritical *acceptance of the unresoluble dichotomy* between HKS and ER as the essential condition for any possible, meaningful speech about knowledge and reality. It is because we already, wrongly accept the idea that on one side there is HKS and on the other side there is ER that we are forced to face the problem of re-connecting them, both at the ontological and at the epistemological level. As long as both elements are seen (as they should be) as *mere parts of a whole unity*, which can be called the Absolute (as the union of everything, which doesn't leave anything outside of it, not even the logical possibility of its negation) they can also be seen as *mere stages* of the development of this Absolute. Knowledge is nothing less than the manifestation of the Absolute on the epistemological side, nothing less than the self-knowledge of the Absolute, whereas external reality, man included, represents the ontological development of the same Absolute. But then we have that the *onto-logical* and the *epistemo-logical* are just two perspectives from which the *logical* development of the Absolute in its dialectic phases can be reconstructed. And the presence of G marks only a *momentary phase* in the dialectical development of the total knowledge of the Absolute. It is simply senseless to keep on speaking about an unknowable reality in itself, once the logical dialectic of the Absolute has taken place, as if there could really be something that is independent from the whole.

I don't pretend that the previous formulation will make the argument more palatable than it generally is to an empirically-educated reader. I believe only that it makes the whole strategy recognizable as fundamentally Hegelian, and if not plausible at least understandable. But let me quote in full what Hegel says in the Introduction of the *Phenomenology of Mind:*

It is natural to suppose that, before philosophy enters upon its subject proper [...] it is necessary to come first to an understanding concerning knowledge, which is looked upon as an *instrument*, by which to take possession of the Absolute (in this context we may read it, "external reality") or as *the means through which* to get a sight of it. [...] This apprehensiveness (i.e. our concern about there being different types of knowledge, one better than another, and about the possibility of chosing the wrong one) is sure to pass even into the conviction that the whole enterprise which sets out to secure for consciousness by means of knowledge what exists *per se*, is in its very nature *absurd*; and that between knowledge and the Absolute (i.e. "external reality) there lies a *boundary* which completely cuts off the one from the other. For if knowledge is the *instrument by which* to get possession of absolute Reality, the suggestion immediately occurs that the application of an *instrument* to anything does not leave it as it is for itself, but rather entails in the process, and has in view, *a moulding and an alteration* of it. Or, again, if knowledge is not *an instrument which we actively employ*, but a kind of *passive medium through which* the light of the truth reaches us, then here, too, we do not receive it as it is in itself, but as it is through and in this medium. [...] Meanwhile, if the fear of falling into error [i.e. into the error of accepting an improper instrument or medium] introduces an element of distrust into science, which without any scruples of that sort goes to work and actually does know, it is not easy to understand why, conversely, a distrust should not be placed in this very distrust, and why we should not take care lest the fear of error is not just the initial error. As a matter of fact, *the fear presupposes something*, indeed a great deal [...]. *It starts with ideas of knowledge as an instrument and as a medium; and presupposes a distinction of ourselves from this knowledge.* More especially *it takes for granted that the Absolute stands on one side, and that knowledge on the other side, by itself and cut off from the Absolute, is still something real*; in other words, that knowledge, which, by being outside the Absolute is certainly also outside truth, is nevertheless true [...]. This conclusion [i.e.the resolution of the PCR by means of a reconciliation of knowledge and the Absolute] comes from the fact that *the Absolute alone is true or that the Truth alone is absolute*. (pp.131-133; all the italics are mine, apart from "per se").

Although a scheme for this last form of Idealism is less useful than for those above, the following graphical representation may be of some help in understanding the disappearance of G:

HEGEL'S STRATEGY

Absolute

logical dialectic

$HKS + ER^{p}$ ← — — — G — — — → $HKS + ER^{n}$
(epistemological level)   (ontological level)
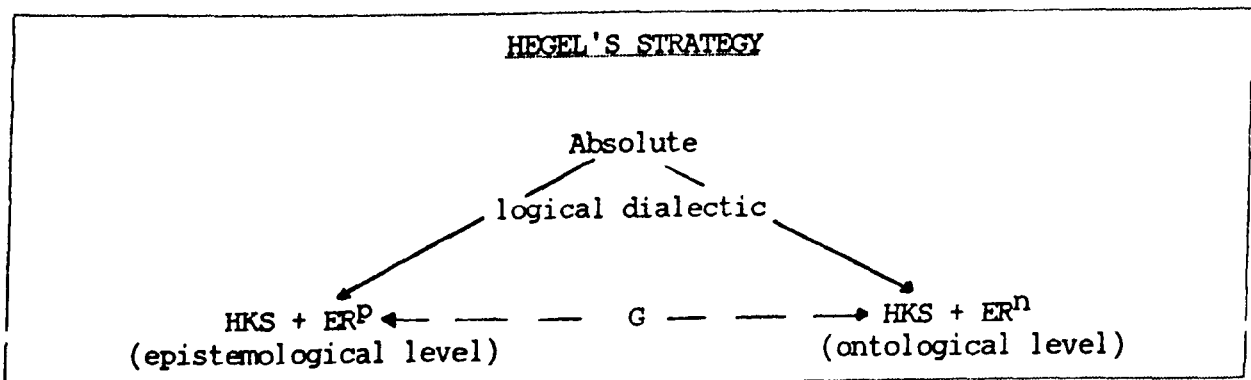
scheme 8

The core of Hegel's strategy can be identified in the famous equation between *reality and rationality*, and on its basis it is understandable how it can be presented as a possible solution of the PCR[7]. If there is no real

---

7) The relevance and closeness of Hegel's thought to the issue of the PCR should not be a surprise, once we remember that Hegel is reacting against Kant's dualism, and this last

distinction between *HKS* and *ER* and between R_e and R_{oi} then all that remains is the *internal articulation* of all-there-can-be, the Absolute, and appearances as well as contradictions are absorbed in its dialectical movements[8]. Hegel's panlogism has its roots in Greek philosophy and as such it is a secularization of Berkeley's theological idealism, which still has a somewhat medieval flavour. His notion of the Absolute and of its dialectic development remains in a precarious equilibrium between atheism and fideism.

There is a deep connection between Hegel's anti-epistemological strategy and his dialectical logic; this latter plays the central role reserved for epistemology in previous forms of idealism. As for the epistemological aspects in the foregoing cases, the Hegelian dialectics is a consequence, not the cause of the strategy. The particular nature of the Hegelian solution is due to his strong program of "internalization" of all the possible relations. As such, the approach he develops turns out to be strongly anti-Kantian and hence anti-Cartesian. It is not by chance that Hegel ties his system with the more classic notion of an *articulated harmony between knower and known* (see next chapter), in anteposition to the dualist findings of the modern tradition. This is also the main reason why pragmatists such as Dewey and Peirce find his philosophy somehow appealing, no matter *how* different their philosophical doctrines are in other respect.

---

represents the most mature elaboration of the consequences of the acceptance of the traumatic doubt. Cf. Hegel [1802], part A, and [1977], Hyppolite [1946] and Lamb [1980].
8) This articulation of the stages of development of the Absolute through the dialectical logic of resolutions of contradictions is the fundamental, ingenious difference between Hegel's philosophy of the Absolute and his predecessors like Spinoza or Shelling. In [1968], pp.364-9, Hegel criticizes Berkeley because he would have merely eliminated one element of the relation Knowing Subject/Known Object instead of radically re-interpreting it.

III.3.d METAPHYSICAL STRATEGIES: CONCLUSION

At the end of this brief journey through the possible attempts to avoid the Perpetual Check of Reason on a metaphysical ground, it is worth outlining some general aspects of the idealist manoeuvre. Seemingly, of the three alternatives, the Platonist is the one which shares the largest common theoretical background with a supporter of the PCR. For it may be reduced to an attempt to avoid the conclusion of this latter only by shifting the elements which compound it. The Berkeleian is the most vulnerable, for it appeals to the same epistemological and ontological paraphernalia employed by the PCR (especially empirical notions), and tries to use it in a very counter intuitive way. And finally, the Hegelian strategy is the most speculative: it stands radically out of the tradition, re-inventing its own logic of contradiction in order to cope with the gap between ER^p and ER^n. All of them try to deal with the Traumatic Doubt that reality in itself may be completely different from what we take it to be by removing the minimal ontological realism that such an observation would require. One of the most significant consequences of this strategy is a decisive commitment in favour of a *monistic* approach, against the problematic dualism professed by the Perpetual Check of Reason. This monistic solution is pursued either by the elimination of the counterpart of HKS and his knowing activity i.e. ER (Berkeley, and in a certain sense also Schopenhauer for example), or by the introduction of a third element (world of ideas, the Absolute) whereby to reconcile the dualist contrast between ER^p and ER^n (Plato and Hegel).

Since it attempts to empty the notion of ER^n, any idealist strategy can be no longer understood as speaking of a *noumenal* external reality in a Kantian sense, that is as unknowable. Properly speaking, we need to employ a more Platonistic understanding of the terminology, where noumenal will mean "non-empirical", "knowable by means of an intellectual act" or "object

cognizable only by means of speculation or intuition". The fact that, despite their strong ontological nature, the idealist solutions are not comprehensible without taking into account their epistemological counterparts reminds us of the second possible way of eliminating G, namely by working on the epistemological side. This is the topic I'm going to turn to in the next section.

III.4 THE EPISTEMOLOGICAL STRATEGY

We have seen that the metaphysical strategy revolves upon the possibility of disposing of G by eliminating the relation of ontological independence between HKS and ER, that is by modifying the assumption of R_{oi} by the minimal ontological realism. Turning now to the epistemological strategy, let me restate that this latter focuses on the validity of an epistemological anti-realist interpretation of the process of knowing. While arguing in different ways against it, any epistemological strategy will try to improve the formula $[R_e(HKS,ER)]$ in such a way as to make possible a "full contact" between HKS and ER. The final target is that of equating the epistemological contact between HKS and ER (R_e) with the parallel, full ontological contact already existent between the two (R_{oi}). Hence, any epistemological strategy concentrates on the possibility of reaching a better conception of the relation occurring between HKS and ER (R_e). Graphically speaking this is to say that, by adopting an epistemological strategy the elimination of G - a resolution of the Perpetual Check of Reason - is obtained or simply attempted by stretching R_e up to the same "extension" as R_{oi}, and not, as before, by a metaphysical reduction of R_{oi} to the same "extension" as R_e.

Obviously, there may be many ways of realizing this "extension", and I shall proceed by merely outlining those aspects of the issue that are

more relevant to the project of this research. Accordingly, the three possibilities a/b/c, mentioned in section III.2, represent the three general perspectives from which the "extension" of the epistemological relation between HKS and ER can be pursued. Let me first illustrate them by means of an analogy.

Suppose we want to combine two elements x and y. Essentially, there are three fundamental ways for them to come together: (a) element x goes towards element y; or (b) element y goes towards element x; or (c) elements x and y meet each other in the middle. Suppose now that x = human knowledge and y = the intrinsic nature of external reality. It follows that, analogy aside, epistemological strategies that try to eliminate G, i.e. the distance between x and y, by improving or modifying some aspects of $[R_e$ (HKS, ER)] can be grouped in three fundamental families, depending on whether they try to support the hypothesis that:

a) the process of knowing is such as to put HKS in full contact with the intrinsic nature of ER so that $ER^p = ER^n$ (i.e. x encounters y in y's place); or

b) the process of knowing is such that owing to it ER shows its intrinsic nature to HKS, so that $ER^n = ER^p$ (i.e. y encounters x in x's place); or

c) there is a third element, which must be included in the process of knowing, that guarantees that $ER^p = ER^n$ (i.e. x and y meet in a third place).

This threefold distinction explains what I meant early in section III.2 when I said that the first epistemological strategy (a) concentrates on HKS, being concerned with the nature of the *subjective conditio sine qua non* of R_e, that is the nature of human cognitive processes; the second epistemological strategy (b) concentrates on ER, being concerned with the nature of the *ontic conditio sine qua non* of R_e, that is the nature of the influence of ER on HKS; and that the third epistemological strategy (c) concentrates on the introduction of a third element in $[R_e(HKS,ER)]$, a

third element that would guarantee that in fact $ER^p = ER^n$. But let me now be more specific.

III.4.a THE SUBJECTIVE CONDITIO *SINE QUA NON* OF R_e.

Members of the first family (a) of epistemological strategies try to avoid the Perpetual Check of Reason by opposing what they consider two key-assumptions implicit in the formulation of the Traumatic Doubt. The first assumption consists in conceiving human cognitive processes as having a qualitatively modifying nature. This issue has been already faced in II.3.a and II.4 and it is not necessary to go over it again. Suffice it to recall that if, contrary to what the Kantian approach maintains, we are to conceive the human cognitive processes as enabling an ideal HKS to grasp the intrinsic nature of ER perfectly well, then obviously no theoretical space is left for the occurrence of à gap G between ER as it is for HKS (ER^p) and ER as it is in itself (ER^n), and a fortiori there won't be anything like the Perpetual Check of Reason.

The second presupposition is represented by the view that when HKS knows ER, what HKS is epistemologically aware of, in contact with or in possesion of, is in fact a third, *epistemic intermediary*, let us call it E-i, that occurs between HKS and ER. This new aspect of the issue deserves some attention.

According to the members of this first family of strategies the PCR is made possible by the fact that the supporter of the Traumatic Doubt works within the limits of a conception of knowledge as an *indirect grasping of the nature of ER through E-i*. Depending on the theory taken into consideration, this third element E-i can be differently characterized as "representations", "ideas" "concepts", "propositions", "sense-data",

"phenomena" and so on. Very generally, the argument holds that the problem

lies in inferring from:

i) the possibility of conceiving P-knowing as a process concerning the

nature of ER but that produces a third element E-i that is then what HKS is

aware of or really knows; both

ii) the possibility of challenging the capacity of E-i to grasp the

intrinsic nature of ER; and therefore

iii) the possibility of sharing an epistemological anti-realist perspective

grounded on a hypothetical difference G occurring between ER as it is in

itself (ER^n) and ER as it is known by HKS (ER^p = E-i).

The epistemological opposer of the PCR would argue that as long as we can

suppose that there is something like E-i between HKS and ER, then it is

always possible for sceptical doubt to slip into our conception of human

knowledge. If we can suppose (i) then it is always possible to infer (ii)

from (i) and (iii) from (ii), ending with an identification of E-i with ER^p

and a radical challenge of the capacity of (E-i = ER^p) to grasp the

intrinsic nature of ER^n. If we accept that our knowledge of the world is

mediated by sense data or mental representations, for example, it is always

possible to challenge the value of sense data or mental representations and

their veracity with respect to the intrinsic nature of a certain portion of

reality on which they depend.

Once the problematic core of the Perpetual Check of Reason has been

so individuated, the strategy revolves around the possibility of avoiding

(ii) and (iii) not just by arguing against the logical possibility of

inferring (ii/iii) from (i), an inference which may be differently and

largely defended by the sceptical anti-realist, but by eliminating (i)

itself. The idea being that without (i) - i.e. without a conception of

knowledge as an *indirect apprehension* or *awareness* of ER - there wouldn't

be (ii/iii), that is there wouldn't be a distinction between ER^n and E-i,

so there wouldn't be any possible identification of E-i with ER^p, and

therefore *a fortiori* there wouldn't be anything like G; and without G the Perpetual Check of Reason could be avoided.

In order to achieve this task, two different solutions are available; they can be briefly introduced as different understandings of the clause "then" in (i). The first consists in a twofold interpretation of "then" as entailing, logically speaking, not only an occurrence of E-i after the process of knowing (post-knowing), but also *before* it (ante-knowing). Accordingly, on the one hand HKS is supposed to be aware of an E-i whose presence occurs epistemologically after the P-knowing; and on the other hand the same E-i may be supposed to occur ontologically before the P-knowing, and in such a way as to guarantee that E-i puts HKS in contact with the intrinsic nature of ER^n. All this recalls the Scholastic solution of the debate about the nature of universals, and obviously it is only a version of the Platonist solution we have already seen above. Hence I won't dwell upon it.

The second solution is more properly epistemological, and the rest of this sub-section is concerned with it. It operates by denying any significative theoretical value to "then", as if it were really supporting a before/after distinction in the process of acquiring knowledge of ER. According to this approach it is not the case that first there is the P-knowing whereby R-knowledge comes to be formulated and then there is an additional form of acquisition of this R-knowledge, but that knowing and being aware of what is known are one and the same process. Hence, the first epistemological therapy against the Traumatic Doubt may be constituted by different forms of *Direct Realism*[9], whereby

(i) HKS is supposed to be epistemically in direct contact with ER;

---

9) The expressions *direct* and *indirect realism* primarily occur in theory of perception, where they indicate *alternative approaches* to the nature of sense-data or the possible role of the given (cf. Dancy [1985], chap.10). Because of the different and more ample perspective of this context - both are referred to the possibility of grasping the intrinsic nature of ER - the two labels are used here without any sense of opposition. This is the reason why I don't consider the epistemological anti-realist component of the PCR as due to a form of indirect realism, but only to a conception of knowledge as indirect. "Indirect realism" will be used in (c) to refer to the last family of solutions.

(ii) the occurrence of E-i is avoided; and

(iii) what HKS knows is ER^n itself, not his *perceptual* or *mental* *representations* of it (E-i = ER^p) occurring in a sort of mental *foro* *interno*[10].

Schematically, direct realism can be illustrated thus:

```
┌─────────────────────────────────────────────────────────────┐
│            THE STRATEGY OF DIRECT REALISM                     │
│                                                               │
│  (epistemological level)        Rₑ                            │
│                                                               │
│         HKS              (E-i  =  ERᵖ)← —G- - →  ERⁿ          │
│                                                               │
│  (ontological level)           R_oi                           │
└─────────────────────────────────────────────────────────────┘
```
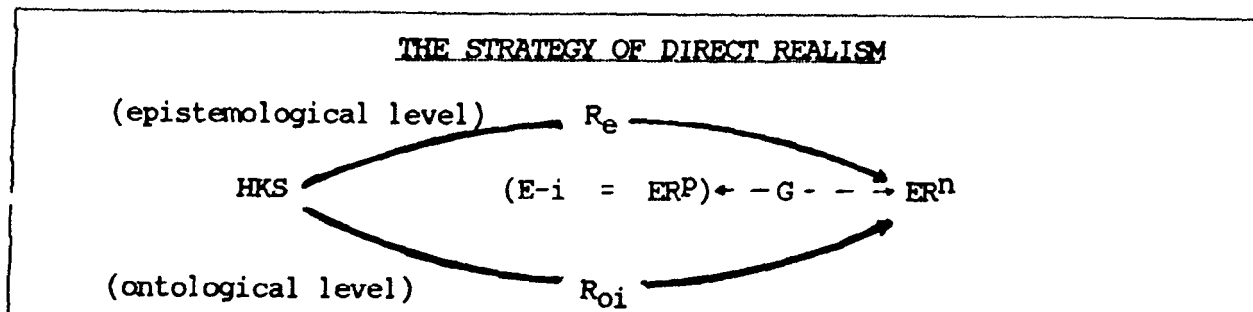
scheme 9

According to some sort of Direct Realism, both E-i and ER^p disappear, and in this way the fundamental elimination of the gap G between ER^p and ER^n is achieved. Since the elimination of (E-i = ER^p) is obtained by working on the nature of human cognitive processes - that is on what is the *conditio sine qua non*, on the HKS' side of the existence of something like P-knowing - this type of solution is to be considered epistemological.

Epistemological strategies in favour of some form of direct realism have two foundamental orientations: there are strategies that try to improve the conception of human cognitive processes in respect to empirical knowledge[11] - on the ground of the acceptance of the Thomistic axiom to the effect that any knowledge has its first source in perception - and strategies that try to improve the conception of human cognitive processes in respect to a *priori* knowledge - on the ground of the acceptance of the supremacy of intuition and/or logical reasoning over perception. Forms of *Platonism* or more generally of *Innatism*, often found in rationalist philosophers like Leibniz, cannot be understood without also taking into

---

10) Rorty [1980] has become by now the *locus classicus* to refer to for an exposition of the story of knowledge as indirect apprehension of an E-i occurring in a *foro interno*.
11) Remembering that the PCR was due to the assumption of a *qualitative* version of Kantian realism, the quantitative version of Kantian realism we saw in II.4 can be considered as depending on this type of epistemological strategies, cf. what Dancy [1985], chap. 10 says about Strawson [1979] (naive direct realism), and about Sellars [1963], ch.3 (scientific direct realism).

account the possibility of an a priori direct grasping of the intrinsic nature of ER. More specifically, in Plato's case it is possible to believe that knowledge of the intrinsic nature of ER is a form of *recollection*; that the process of recollection is a direct and perfect apprehension of an "idea"; that the "idea" is a perfect ontological model of ER; and consequently, that we can have direct knowledge of ER.

III.4.b THE ONTIC *CONDITIO SINE QUA NON* OF R_e

"Vasari tells of Donatello at work on his *Zuccone* looking at it suddenly and threatening the stone with a dreadful curse, "Speak, speak - *favella, favella, che ti venga il cacasangue* !"[12]

Donatello probably meant that the statue was so well realized as to be almost alive, and as if its only defect was that of lacking the mastery of a language. In the present context this anecdote may be useful in order to introduce the second family of epistemological solutions of the Perpetual Check of Reason, those concerned with the epistemological role that is supposed to be played by the *ontic conditio sine qua non* of R_e, i.e. the *actual presence of ER* in (Re (HKS, ER)) and its influence on HKS.

From the perspective of this type of strategies, the idea that "reality in itself may be completely different from what we take it to be" relies on the flagrant erroneous assumption that, like Donatello's Zuccone, reality in itself doesn't speak to HKS, at least not loudly enough to be heard. Suppose there are two people A and B one of whom (A) questions the other (B) about his name. Suppose B never answers. There may be thousands of clues whereby the investigator A may come to guess B's correct name - from what someone else says about the silent B, to the initials on B's shirt, to a name written on B's diary or on the mail B has received etc. - and yet A will never be sure he is not wrong. Of course all the difficulties lie in the fact that B doesn't say anything. But now suppose

---

12) Gombrich [1989], p.81, quoting Vasari, *Vite*, II, 404.

also that B speaks freely: the whole problem would substantially[13] disappear, for B would now answer A. Alongside this parallelism, our second type of epistemological opponent of the PCR believes that the Traumatic Doubt can be conceived and taken seriously only as a consequence of an erroneous assumption: that HKS and ER are not engaged in a mutual "conversation". Only if HKS and ER are considered mutually strangers, epistemologically unrelated since the very beginning of the process of knowing, can the problem of their conjunction arise. Members of this family of strategies try to solve the PCR by supporting the hypothesis that *somehow* the statue is alive and does speak, at least clearly enough to state its intrinsic nature. From an epistemological point of view, this is in line with the idealist ontological strategy in favour of a more harmonious conception of the relation between knower and known.

A clear statement of this strategy is given by Aristotle in *De Anima* II,4,5[14]. On the whole, this second kind of epistemological strategy advocates that:

i) there exists an *active role* of ER on HKS' mind, intellect, brain or reason;

ii) this kind of *influence* is conceivable as occurring chiefly at the level of the senses, whose affection would *inform somehow* HKS' mind, intellect, brain or reason; and therefore

iii) there is a first passive role of HKS' mind, intellect, brain or reason in respect to the acquisition of first data about the intrinsic nature of ER.

---

13) 'Substantially' because there might be other kind of problems concerning the proper way of formulating the right questions and understanding the consequent answers ('reliability').

14) A discussion of the isomorphist thesis is given by Sellars [1963], chap. 2. For its importance in contemporary American philosophy cf. Chisholm [1982], pp.177-178. The crisis of the ismorphist approach to the foundation of a theory of knowledge starts with Ockam and ends with Cusanus (cf. Watts [1982], pp.224-225), and it is related to the crisis of the Aristotelian metaphysics of matter and form

The strategy may be represented thus:

THE ARISTOTELIAN-SCHOLASTIC-LOCKEAN STRATEGY

(epistemological level) R_e

HKS $ER^p \leftarrow - - G - - - \rightarrow ER^n$

(ontological level) R_{oi}
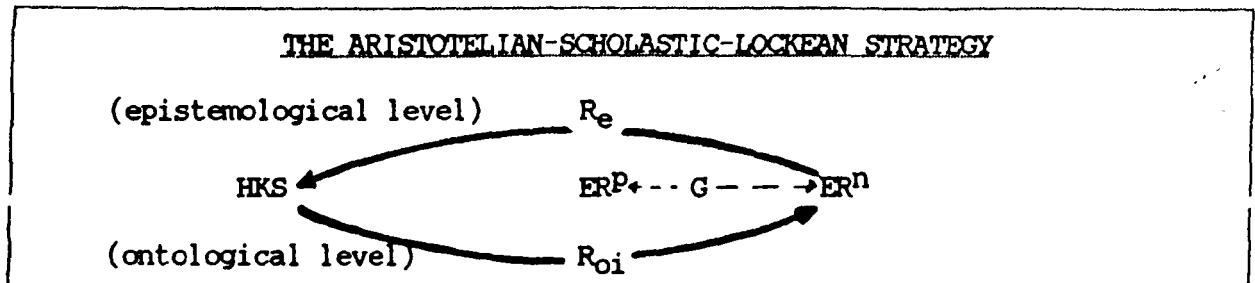
scheme 10

Scheme 10 shows that the solution of the PCR is obtained by eliminating ER^p, and therefore G, thanks to an inversion of the arrow characterizing the epistemological relation occurring between HKS and ER^n.

Unfortunately, despite the sketchy description, it is easy to see that this strategy immediately encounters some serious problems that render it less appealing than it seems to be. For, metaphors aside, it is not very clear what must be understood by the "somehow" introduced above, or what this sort of "revelation" of ER to HKS would consist in. One of the most famous application of scheme 10 is Locke's hypothesis about the initial passivity of a human mind and the consequent impression it receives from ER^{15}, an hypothesis that in turn must be connected to the Aristotelian/Scholastic conjecture about the presence of an *isomorphism* between a knowing mind and a known object during the first stage of the process of knowing, that would allow this latter to impress its forms on the former.

In conclusion, the epistemological strategies that stress on the role of ER within the process of knowing operate the "extension" of R_e by arguing in favour of an active role of ER in respect to HKS: it is the former that goes to encounter the latter. Our Aristotelian/Scholastic/Lockean opponent of the PCR still considers R_e a mutual relation, but he conceives its occurrence as due first to an action of ER on HKS and only after an answer of HKS to ER.

---

15) 'If it be asked, why Locke attached so much importance to this doctrine [i.e. that in the perception of simple ideas our mind is merely passive], the answer is that he conceived this passivity as a guarantee, and, indeed, the only possible guarantee, that there is nothing arbitrary in the ultimate data of cognition' (Gibson [1960], p.61).

III.4.c THE EXTERNAL GUARANTEE

The third and last family of epistemological strategies is concerned with the hypothesis that HKS'knowledge and the intrinsic nature of ER can be made to join each other in a third, middle place. The fundamental idea, in this case, is that the Perpetual Check of Reason is made possible by a significant omission regarding a third element, let me call it E3, such that if it were taken into account it would eliminate the gap G occurring between ER^p and ER^n. Our third opponent of the PCR may hold something like this:

i) the presence of G between ER^p and ER^n is caused by the interpretation of R_e as a modifying relation;

ii) this interpretation, in turn, is possible only because the significative role of E3 - whose function is to guarantee that in fact ER^p grasps veridically the intrinsic nature of ER^n - is disregarded; and that

iii) once E3 is taken into account, R_e can be discovered to be not necessarily a modifying relation that produces an ER^p that is substantially different from ER^n, i.e. that substantially doesn't grasp the intrinsic nature of ER^n.

The conclusion is that thanks to the presence of E3 ER^p can be discovered to be an adequate representation of ER^n and in this way G may be eliminated. Of course the therapy simply consists in re-introducing some crucial consideration about E3. This can be done in different ways. Depending on the theory in question, the identification of E3 may vary from God, like in Descartes, to a *third realm of ideas or truths*, to epistemic *criteria*. Like in the case of the different interpretations of E-i this is not very important in this context. What is relevant to the present exposition is that E-3 occurs between ER^p and ER^n as an epistemological bridge, not between ER^p and HKS as an ontological bridge, like in Plato's

strategy. So, roughly speaking, HKS produces ER^p and E3 guarantees that there isn't any gap G between ER^p and ER^n.

So this last family of epistemological strategies can be graphically represented thus:

THE CARTESIAN STRATEGY

(epistemological level)   Re   E3

HKS   ERp ← - -G- - → ERn

(ontological level)   Roi
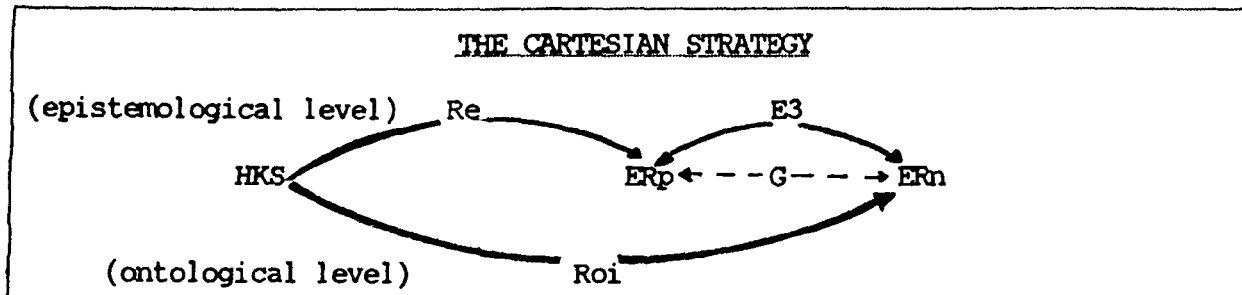
scheme 11

ER^p represents the place where HKS and ER^n "encounter" each other. It is obtained thanks to the epistemic activity of HKS, but its goodness as a trustworthy image of ER^n is guaranteed by E3. With a classic metaphor we may say that E3 *synchronises* the *ordo idearum* with the *ordo rerum*.

III.4.d EPISTEMOLOGICAL STRATEGIES: CONCLUSION

Just as the idealist strategies shared some common features among themselves, we find that the epistemological strategies too share underlying characteristics. The most evident is still a radical anti-*dualist tendency*. This is not attacked necessarily in the name of some kind of *monism*, for as in the case of III.4.c the dualism of the PCR can be overcome by means of the introduction of a third element. What is central is that the dualist opposition of ER as it is known by HKS and ER as it is in itself is somehow opposed and resolved. Another characteristic may be individuated in a limit shared by all the alternatives: none of them eliminates the *logical possibility* of the PCR. They support hypotheses to the effect that *the PCR would not in fact occur*, not that it is not *conceivable* that it would not occur in theory.

With the exposition of the epistemological strategies the first and central part of this chapter is concluded. The strategies I'm going to portray in the next section can be grouped in a much less uniform and unique typology. They should be seen, especially the Kantian solution, as already going half way towards making conceivable the radical reinterpretation of the PCR in terms of refusal of its anthropological component.

III.5 ALTERNATIVE STRATEGIES

Up to here we have seen how the original Scheme 5 could be differently modified in its internal organization so to avoid the presence of G between ER^p and ER^n. By means of metaphysical and epistemological strategies we have put our finger on the delicate mechanism that leads to the production of the Traumatic Doubt and, if only in a very sketchy way, we have learnt how to modify the mechanism itself in such a way as to obtain the wanted result: the avoidance of the PCR. In the previous section, the suspicion was introduced that the mechanism in itself could be incomplete, and in need of some supplementary element that could make it work properly. Time has come now to develop this suggestion by considering those strategies that opt for the possibility of placing another "mechanism" beside the one represented in scheme 5. These strategies, once again three, all start from the characterization of the Perpetual Check of Reason as something unavoidable, as a necessary inescapable result of the occurrence of an epistemic relation like R_e between HKS and ER, yet they draw different consequences from such assumption. Let me start from the most radical of them.

III.5.a SCEPTICISM

In II.1 I said that forms of scepticism like Gorgia's or Protagora's, or even like that entertained by Descartes, could be reinterpreted as forms of reaction against the presence of the PCR. That this is so should now be evident. In this context Scepticism in its pure form (i.e. as free from any vein of irrationalism, see next sub-section) will consist in the attitude of doubt with respect to the possibility of knowing the intrinsic nature of ER. As such, it may represent the most direct and natural consequence of the acceptance of the existence of a gap G occurring between ER as it is for HKS and ER as it is in itself. It is for this reason that the Traumatic Doubt is commonly regarded as a sceptical challenge (cf. above III.2 and III.3.b): scepticism and the Perpetual Check of Reason may be judged to be the two sides of the same coin. The most direct consequence of the sceptical attitude can be this only: the abandonment of any epistemological enterprise. Through the sceptical amplifier, the radicalization of the suspicion that "reality in itself may be completely different from what we take it to be" ends with the elimination of any interest either in a theory of knowledge or in a theory of reality. Obviously there is no need for a pictorial illustration that would be either identical with scheme 5 or simply empty.

III.5.b IRRATIONALISM

A further, less radical but still negative option open to those who accept the inevitability of the PCR is represented by the attempt of escaping from the epistemological limits within which the PCR has been formulated, by appealing to *other sources of knowledge*. It will be remembered that in I.5.b - while exposing the kind of perspective whereby

the following sections had to be understood - I put forward the proposal of restricting the epistemological field only to general objective knowledge, intending by this to exclude, among other things, any consideration about forms of knowledge like mystical intuition. The role and the validity of that restriction could be now contested. The lines of the reasoning may be simply put thus:

i) if we assume the possibility of investigating the nature of ER by means of *objective knowledge* only; and then

ii) we discover that this assumption leads to the inevitable presence of a gap G occurring between ERp and ERn, and eventually to the consequent sceptical conclusion; then

iii) supposing that either meta-theoretically we still want to overcome G and therefore the vicious circle that leads us to the PCR, or that theoretically we still believe that HKS really grasps the intrinsic nature of ER; then

iv) we could try to find a *better epistemic approach* that may allow to HKS to grasp perfectly the intrinsic nature of ER.

Generally speaking this *privileged access* is indicated in some form of *intuition*, which has the properties of being (a) personal; (b) fundamental in respect to any other knowledge; (c) epistemologically *unshakable*, an intuition may be defined "sure", "doubtless", "incontestable", "certain", "infallible", "inarguable", "incontrovertible", "indisputable", "indubitable", "irrefutable", "undeniable", "unquestionable"; and finally (d) representative of a direct access to the intrinsic nature of ER[16]. Strategies belonging to this family don't resolve the PCR by merely stipulating the presence of some sort of intuition (a manoeuvre that would be extremely odd), but rather the opposite: for it is because this kind of strategies assume that intuition plays a central role

---

16) Under this respect, intuitionists are strictly linked with supporters of objective knowledge as a direct grasping of the nature of ER. It is not by chance that both approaches are characterized by a large use of visual metaphors.

in human knowledge that the whole issue of the PCR doesn't arise within their contexts. Such strategies can be called "intuitionistic", provided we make use of precautionary quotation-marks in order to distinguish them from the meta-mathematical position labelled "Intuitionism". "Intuitionistic strategies" can be visually imagined by adding a further relation to the scheme 5, abbreviated by $R_{int.}$, a relation that goes beyond R_e, overcomes ER^p and puts HKS directly in contact with ER^n:

```
┌──────────────────────────────────────────────────────────────┐
│                    THE "INTUITIONISTIC" STRATEGY               │
│   (level of privileged access)        R_int.                   │
│   (epistemological level)       R_e                            │
│       HKS                              ER^p ← — G — — → ER^n    │
│   (ontological level)           R_oi                           │
└──────────────────────────────────────────────────────────────┘
```
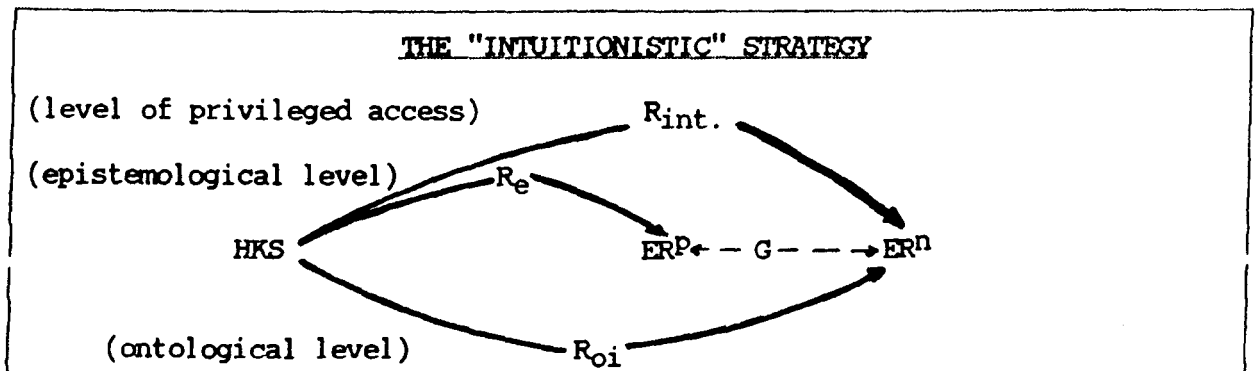
scheme 12

The field of "intuitionistic" theories is a jungle which luckily enough we don't need to enter. The essential indications of the kind of strategies that could be elaborated by adopting some conception of intuition are imaginable. But I believe it is worth remarking on two aspects of the issue relevant to the present discussion.

First, it may be important to distinguish at least two main families of strategies: those supporting *anti-rational forms of intuitionism*, such as Bergson's, and those supporting *super-rational forms of intuitionism*, very common in modern philosophers like Descartes, Spinoza, Leibniz, or Locke, but still in fashion also among contemporary philosophers like Husserl. According to the former, intuition is another, better road to apprehend the intrinsic nature of ER, and it is irreconcilable with that form of public, argumentative, rational knowledge that has been considered the only subject of epistemology up to now under the label of "objective knowledge". This is not true as far as the latter form of "intuitionism" is concerned. For in this case a certain kind of intuition is just the last step (or the first, depending on the point of view) that has to be made

after having gone all over the general objective knowledge, in order to grasp the first principles of the nature of reality. Then, strictly speaking, only the former may be fully considered to belong to this section, for the latter may more easily be assimilated to those forms of direct apprehension of the intrinsic nature of ER sketched under the label of Direct Realism in III.4.a.

Secondly, according to some authors and primarily to Kant, intuition can be a way of knowing-producing the object known. This is Kant's notion of *intellectual intuition* which, unlike the *sensible intuition*, is not passive in respect to its object, and while it knows it also produces the object known. It is very common to find this kind of intuition among idealists like Fichte[17] or Schelling. Obviously for theories working with this kind of intuition there is no problem of a gap between ER^p and ER^n for the activity of knowing is also the activity of "positing" the reality that has been known. I shall come back to this connection between *knowing* and *doing* in the next sub-section for some further remarks.

III.5.c REVALUATION

We hare finally arrived at the last kind of attitude that it is possible to adopt in respect to the PCR: acceptance of the dualism between ER^p and ERn united with an attempt to make the best out of it. More than a reaction against the eventuality that "reality in itself may be completely different from what we take it to be" this attitude represents a resignation to that possibility, which is accepted as a repugnant matter of fact. What makes it different from a mere case of scepticism is a certain value that this last strategy tries to attribute to the irreparable dualism endorsed by the Traumatic Doubt. Two alternatives are possible and in fact

17) See for example Fichte [1987]. The second book is a perfect introduction to the idealist approach to the nature of knowledge.

have been historically developed: a regulative use of the hypothetical presence of ER^n and of our presumed desire to know it; and a restriction of the concept of real knowledge only to cases of knowledge concerning history.

The first alternative is Kant's and has a link with the epistemological side of the issue. After the Humean breakdown of R_{ep}. Kant reinterprets the relation between knower and known as if it were this latter that has to be adapted to the former. In order to support the value of objective knowledge Kant is forced to assume that reality is knowable only insofar as it can be adapted to the mental categories of the HKS. However, in this way the intrinsic nature of ER remains hidden, and knowledge becomes constitutive knowledge of phenomena. Like Midas, who at the beginning wanted to transform everything in gold by the touch of his body, the Kantian knower dies because of "noumenal starvation". Kant wanted to avoid the Humean paradoxical conclusions and ended with digging an epistemological abyss between HKS and ER. The regulative use of the ideas of Reason (i.e. of the futile attempts to know what ER is in itself, overcoming our phenomenal knowledge of it) is introduced to temper the overwhelming effect of the limits imposed on HKS' knowledge: human knowledge is supposed to be driven by the desire to know something that in fact will never be known. Rep. and the consequent perfect grasp of the intrinsic nature of ER remains unreachable, and yet it has the function of promoting new researches. A scheme for the Kantian Strategy will be:

scheme 13
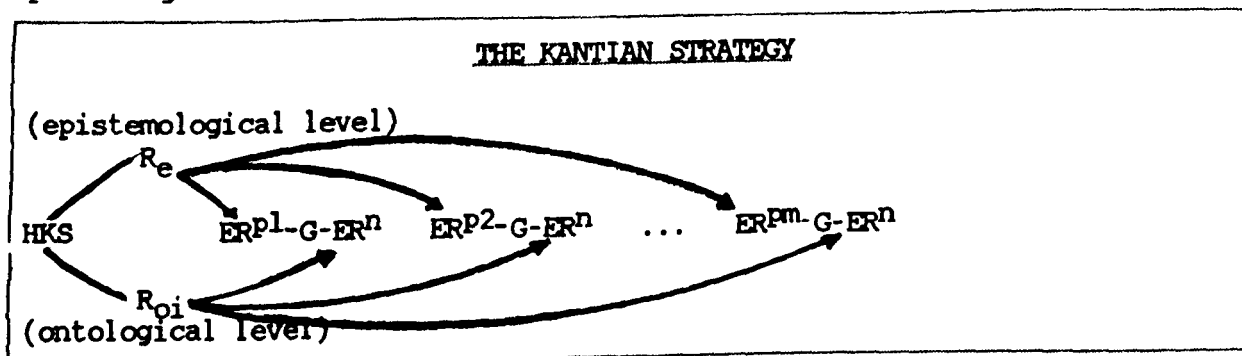
A perfect grasp of the intrinsic nature of ER is a mirage rather than a realisable goal: unlike Peirce, from a Kantian perspective a final perfect knowledge of ER in itself is not even logically admissible, and the dualism between ER^p and ER^n is final and will never be surmounted[18]. Yet, G is understood as the origin of a challenge, of an everlasting tendency towards a perfect knowledge of ER^n, as producing not just a *negative feeling of alienation*, but a *positive tension* towards a complete full knowledge of the world.[19]

The second alternative is Vico's and it has a certain connection with the ontological side of the issue. It will be remembered that in discussing the nature of ontological realism in I.4 some radical problems have arisen about the adequacy of the "mind-independent" clause. Very briefly, it has seemed that by adopting that clause to define ontological realism too many aspects of ER happen to be left outside of our picture, namely those historical (as opposed to natural) aspects of ER that an ontological realist has been supposed to be willing to include in his conception of an independently existent, external reality. A Vichian strategy may now be considered to depend on the distinction, introduced in that occasion, between natural and historical reality. The basic idea is that real knowledge of the intrinsic existence and properties of something is possible only when this something belongs to historical reality. More clearly, a Vichian reaction to the PCR may amount to saying that if, on the one hand, it is true that the PCR makes evident the impossibility of obtaining a full knowledge of ER^n, this is true only in so far as natural ER is concerned. For, on the other hand, the PCR would also leave open the possibility of a perfect knowledge of ER^n in so far as historical ER is

---

18) Very roughly, if we eliminate also the positive reading of the dualism between ER^p and ER^n then we obtain Schopenhauer's vision of the relation between HKS and ER. On the other hand, German Idealism started as a reaction against the Kantian dualism between *noumena* and *phenomena*, both by means of the concept of a *creative intuition* and by the introduction of the concept of *Absolute* and its *dialectical development*.
19) Nowadays this kind of strategy may be partially recognized a operating in "neo-Kantian" authors like Putnam and Goodman.

concerned. If we have real knowledge of something only if we know the principles and the causes according to which that something is that something and not something else, natural ER falls beyond our capacities, and the actual domain of human knowledge (and therefore of epistemology) remains historical ER. With the last graphic representation we have:

THE VICHIAN STRATEGY

(epistemological level)
(historical ER)   (natural ER)

$$R_e \qquad\qquad R_e$$

$$ER^n \leftarrow\cdots G \rightarrow ER^p \qquad HKS \qquad ER^p \leftarrow - G \longrightarrow ER^n$$

$$R_{oi} \qquad\qquad R_{oi}$$

(ontological level)
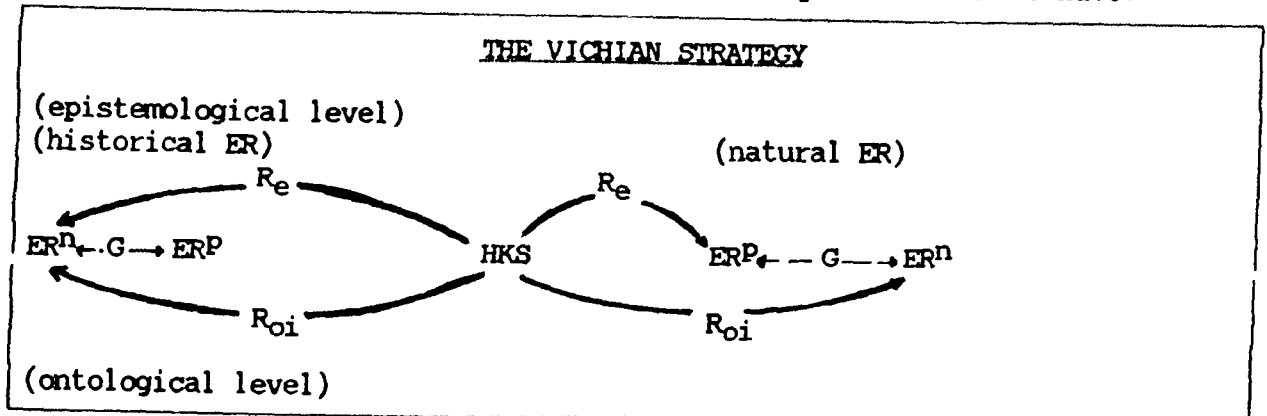
scheme 14

It must be admitted that the reasoning has some force. The Traumatic Doubt was supposed to concern the possibility of a significant gap between ER in itself and ER as it is for HKS, and certainly this gap, even if admitted in the natural field, could hardly find any justification in respect to historical ER. In this latter case HKS is both the knower and the maker (i.e. the *ontological ratio essendi*) of ER, and this identity (the same identity expressed by the dictum "verum ipsum factum") makes possible that, in the best cases of knowledge, there won't be any G between historical ER^p and historical ER^n.

For the supporter of the Vichean strategy the fact that in science disciplines like physics or chemistry enjoy a higher consideration than sociology or anthropology may not be a difficulty. For in the former case we would be in contact only with abstract constructions that don't have anything to do with the intrinsic nature of the world, while in the latter case the imprecision and approximation of the results would show a more fruitful degree of closeness to the intrinsic nature of historical reality. A Vichian philosopher may simply argue that adequacy to logico-mathematical

precision is not an absolute criterion to judge how close we are to grasping the intrinsic nature of ER^n.

III.6 CONCLUSION

I said in the introduction that in this chapter I meant to achieve several tasks. I wished to complete the analysis of the PCR, to introduce the second part of this study by sketching the principal strategies adopted to oppose it and, consequentially, to show the centrality of the PCR in the history of epistemology. In this final section I'd like to discuss this last point, so let me first summarize the main conclusions of this chapter.

In this chapter I have considered the main alternative perspectives whose assumption could render the formulation of the PCR avoidable. Since I have exposed the theoretical content of the PCR as a particular result of the inference: *if* $[(\text{Anti-R}_{ep}.^{D15}) + (\text{R}_{ont}.^{D18})]$ *then* $[\text{G} (ER^P, ER^n)]$, each alternative has been introduced as if it concerned a single aspect of this formula. In a short list, we have seen that, according to different perspectives the Perpetual Check of Reason could not occur because:

i) there is an ontologically and epistemologically "better" ER^n *closer to HKS than ER;*

ii) even if not (i), *there is nothing like an ER independent of HKS;*

iii) even if not (i)-(ii), *there is not a real distinction between HKS and ER;*

iv) even if not (i)-(iii), *HKS has a direct access to ERn;*

v) even if not (i)-(iv) *there is direct influence of ER on HKS;*

vi) even if not (i)-(v), *there is a third element which guarantees that HKS is in full contact with ER.*

In sections III.3.d and III.4.d I underlined that all these alternatives share a common anti-dualist tendency.

It will be remembered that when I tried to make explicit why the Doubt is traumatic, I suggested that to the ontological and to the epistemological had to be added a third component, condensable in the view that a gap between reality as it is in itself and reality as it is known by us is something negative, that, if possible, should be avoided by any means. We may now realize that the acceptance of the Aristotelian Postulate is expressed in the opposition to the possibility of a dualism between ER^p and ER^n, that is against the occurrence of G. In this sense the Aristotelian dictum "all men by nature desire to know" may be translated as "all men by nature desire to get rid of G". Hence it will appear also clear that all the alternatives from (i) to (vi), in so far as they are united by a strenuous anti-dualism, they uncritically presuppose the validity of the Aristotelian Postulate. Not only do none of the hypotheses focus on the possibility of working on this third component in order to solve the PCR, but each one can be seen to be motivated in its research by a more or less implicit sympathy towards the AP. Far from recognizing its problematic role in the formulation of the Traumatic Doubt, the epistemo-ontological strategies start from the assumption of the AP. It is because all of them regard the occurrence of G as a highly negative phenomenon that they make any attempt to avoid the conditions that render its appearance possible.[20] Only in section III.5 have we been faced by the possibility of accepting the inevitability of the dualism introduced by the Perpetual Check of Reason, together with a more positive consideration of it. So that to the previous list we may add:

vii) even if not (i)-(vi), it is possible to give a a more positive understanding of the gap occurring between ER^p and ER^n.

We have seen that this first, timid proposal is not yet radical enough to avoid a feeling of regret for the loss of knowledge of ER^n and

---

20) On the metatheoretical possibility of justifying the content of the AP because otherwise there wouldn't be philosophers who would try to avoid the Perpetual Check of reason see chapter V.

yet it already opens the way to a more drastic approach. For, despite the fact that also (vii) still accepts the Aristotelian Postulate, it introduces the idea that it is possible to have a different valuation of the TD "reality may be completely different from what we take it to be". It is by using this hint as a bridge that I shall enter into the second part of this work, where the possibility of "dissolving" the Perpetual Check of Reason is pursued by focusing on its third component, the Aristotelian Postulate.

SECOND PART

GENERAL INTRODUCTION

With the previous chapter the first part of this study has been
concluded. Having a deeper mastery of the different aspects of the
problem we are dealing with, we can turn to the principal issue of the
research: the rejection of the Aristotelian Postulate as a solution of
the Perpetual Check of Reason. The three following chapters are intended
as a large and more detailed exposition of one of the possible solutions
of the Traumatic Doubt. In this sense the summary of the next three
chapters may have appeared simply as a further Section of chapter 3. In
order to present a fresh start, let me summarize what conclusions we
have achieved so far, and present the hypothesis I'm going to support in
this second part of the work.

I've started this investigation by saying that one of the crucial
question in the theory of knowledge is represented by the possibility of
there being a gap between what external reality is in itself and what
external reality is for a human being who knows it. In the first part
I've repeatly said that in order to give some credit to the hypothesis
that "reality may be completely different from what we take it to be",
we need to give some credit both to the hypothesis that *there is*
something like an independent external reality and that *somehow* our
cognitive processes are not good enough to grasp its intrinsic
properties. And in order to consider this possible state of affairs
really problematic we must presuppose that we desire to know what the
intrinsic nature of ER is. In the first and the second chapter I have
articulated these contents in some detail. In the third chapter I've
sketched how the PCR could be solved by adopting some modification of
its formulation both on the ontological and on the epistemological side.

This is useful to introduce now the main hypothesis of this second part, namely that the elimination of the Aristotelian Postulate may amount to a reinterpretation of the Perpetual Check.

The hypothesis can be intuitively stated by simply saying that if we have an explosive mechanism made of three components, in order to avoid the explosion it is sufficient to deactivate or tamper with one of the three components, either the timer, the explosive or the detonator. The possibility of "deactivating" the Traumatic Doubt by means of an anti-Aristotelian hypothesis relies on two presuppositions:

i) that desire for knowledge just for its own sake is a *conditio sine qua non* of the TD; and

ii) that such desire is not a *necessary principle* of the genesis of the *process of knowing* (even if it may be a *sufficient* principle) and can be substituted by a better principle.

It is only by assuming (i) and (ii) that it can be argued that:

iii) the substitution of the AP with a *Peirceish Postulate* (henceforth also PP) may amount to a resolution of the TD.

The first assumption is easy to explain and difficult to argue: *failing* in grasping the intrinsic nature of external reality looks like a *failure if and only if* we presuppose an *interest* in grasping the intrinsic nature of external reality. In other words, a *failure is a failure* only on the ground of an *expectation* or a *project*. It is only out of a desire or a plan, or an intention to do A that there can be something like a *frustration* consequent to the incapacity of doing A. This is precisely the third condition presupposed by the formulation of the Perpetual Check of Reason *qua* a problem, that is *qua* Traumatic Doubt, and precisely what the implicit assumption of the Aristotelian Postulate copes with it. Without presupposing a desire to know the intrinsic nature of ER for its own sake, the incapacity or impossibility to grasp ER^n wouldn't look like a *failure*.

The second assumption calls for an introductory explanation. Apart ,from being the *conditio sine qua non* of the Traumatic Doubt, the AP is also a *principle* which is supposed to be *sufficient* to explain why a HKS activates his cognitive processes in order to know ER, i.e. it is also supposed to give the *ratio essendi* of the process of knowing, at any rate as far as the production of intellectual knowledge is concerned. According to the AP a HKS is supposed to exercise his cognitive processes in the attempt to know the intrinsic nature of ER *because* he is interested in knowing the intrinsic nature of ER just for its own sake. I shall argue that, although the assumption of the AP can be a *sufficient explaination of why* HKS activates his cognitive processes in order to know ER at an intellectual level, it does not present the *necessary ratio essendi* of the P-knowing and can be substituted by some other hypothesis.

The three chapters that constitute the second part of this work concern (ii) and (iii). In chapter 4 I will analyse the nature of the AP as carefully as I've described the nature of the other two components of the TD in chapter one and two. In chapter 5 I will survey the main reasons there may be to support the acceptance of the AP. We shall see that none of these reasons are sufficient for adopting the AP. And finally, in chapter 6 I will put forward an alternative hypothesis about the *ratio essendi* of P-knowing whose assumption will lead to the reinterpretation of the Perpetual Check of Reason qua a problem.

CHAPTER IV

THE FORMULATION OF THE ARISTOTELIAN POSTULATE

"Sleep on,
Blest pair; and O yet happiest if we seek
no happiest state, and know to know no more"
Milton, *Paradise Lost*, IV, lines 773-5.

IV.1 INTRODUCTION

At the very beginning of this investigation (cf. the General Introduction to the First Part) I said that the Aristotelian Postulate is synthesized in Aristotle's dictum:

AGS) "pantes anthropoi tou eidenai oregontai phusei"; (Met.I.I,908a 21, where AGS henceforth reminds us that it is *Aristotle's own Greek Sentence* in question).

In discussing the nature of the AP, its role in a theory of knowledge and its theoretical validity, we need to realize that such rough identification was put forward only in order to provide an approximate line of reasoning, provisional, but now in need of a considerable refinement.

To start with, let me say that in the *Corpus Aristotelicus* there is nothing like a full-blooded formulation or endorsement of the AP. Not even the first Book of the *Metaphysics*, where we find AGS, really represents an exposition of "the Aristotelian Postulate". The AP as the *ratio essendi* of the genesis of the P-knowing, as the *conditio sine qua non* of the TRaumatic Doubt, hence as the reference of my criticism, is a *logical construct*, only the roots of which can be accredited to Aristotle.

This should not be surprising. Like other philosophical theses that have never been thought to be in need of a plain formulation in order to receive full support, it may even be the case that the AP has never been advocated by any philosopher in that unclothed form in which I shall

present it. Indeed, the fact that so many different solutions of the Perpetual Check of Reason all have turned out tacitly to assume the AP leads to the conclusion, that the AP needs to be extracted from the background of the history of epistemology, where we cannot find it in any "ready-to-be-argued" form. This may seem to affect the significance of the Postulate and the central role I'd like to ascribe to it in respect both to the genesis of the process of knowing and to that of the Traumatic Doubt. For what is the point of building up such armour against an enemy that has never existed in reality ? Isn't the AP a mere spectre whose coming in life is due only to the perspective adopted in this work, an unjustified idiosyncrasy which we would be better rid of ? The answers should be clear, for the questions show a misunderstanding of the real nature of the issue and an incapacity of addressing it properly. Although from a narrow philological point of view the AP can in fact emerge as an artificial construction, its theoretical content can be found spread all throughout the mainstream of the western epistemological tradition, within which the importance of the AP is altogether undeniable. The logical presence and influence of the AP, though clothed in different guises, may be recognized as continuous, from Aristotle to Descartes, from Thomas Aquinas to Hegel, from Husserl and Heidegger to Wittgenstein (at least in so far as we still recognize an epistemology in these two latter authors).[1] The point has already been made clear in chapter 3 and here it is not necessary or opportune to argue in its favour; at any rate it will acquire a sharper configuration in the course of the chapter.

Rather, it is important to realize that - if the incontestable extensive presence of the AP in so many philosophical perspectives may render it easier to calculate its importance - this also explains why to present a precise, accurate definition of the AP is both a necessary and difficult task to achieve. Having been taken for granted by so many

1) For a contemporary re-assertion of the Aristotelian Postulate cf. Gadamer [1976].

thinkers, the AP has hardly ever received enough attention to rise to the level not just of an effective debate, but even of an explicit formulation. Yet this latter is definitely necessary if the former is to be started.

Turning to the individuation of the AP in the Aristotelian sentence, the AP has indubitably received an implicit, historically very influencial formulation in Aristotle. It is mainly the Aristotelian dictum that we find quoted when philosophers want to refer to "man's pure desire to know" and it is the Aristotelian *intellectualism* that has influenced so many epistemological studies. This is not to say that Aristotle was the only Greek philosopher who had a conception of human nature as that expressed by his famous dictum. On the contrary, Plato endorsed a very similar view of the desire to know as a spontaneous tendency, although for different metaphysical reasons (cf. the *Symposium*).[2] So that, if there is some truth both in Whitehead's famous remark that Western philosophy is a series of footnotes to Plato and in Peirce's idea that, on the other hand western philosophy is simply the articulation of Aristotle's thought, we may understand why the hypothesis of a spontaneous desire for knowledge just for its own sake has been always assumed as un-controversial. It is one of the more deeply rooted legacies of Greek philosophy. The reason why I wish to focus on Aristotle is only that Aristotle states such a notion more clearly than any other Greek philosopher, and his influence in later medieval philosophy, together with his rationalism, make his position the most interesting to analyze as a starting point. An analysis of the Aristotelian dictum will certainly provide a promising starting point although it won't be sufficient to reach a full understanding of the Postulate. Part of the hermeneutic problem is reducible to producing an adequate formulation of the AP based on the AGS while avoiding a too naive identification with it. Thus, with this *proviso* borne in mind, in section 2

2) That a large part of Ancient Greek philosophy before Aristotle was also strongly orientated towards a vision of man as internally moved by an interest for knowing has been well argued, scholarly speaking, by Mondolfo [1958], second part, especially chap.II entitled 'The Will as the Condition for Having Knowledge and the Active Conception of the Process of Knowing'.

I shall begin by examining the Aristotelian roots of the AP. Since the AP, as an artificial construction, cannot be simply identified with Aristotle's dictum, it is necessary to elucidate in what sense and how far the idea that "man is interested in knowing the intrinsic nature of ER just for the sake of knowledge" is indeed Aristotelian. By analyzing Aristotle's position I will be able to point out some first features of the AP that will later turn out to be relevant to its final definition. Since an analysis of the Aristotelian dictum, however, has been already supposed to be insufficient to produce an accurate and logically satisfying formulation of the AP, I shall proceed by retracing some further characteristics of the Postulate in the history of philosophy (section 3/5). Only after its historical source has been so reviewed will I be able to outline the theoretical contents of the Aristotelian Postulate and give an explicit and more rigourous articulation of it. This will develop into a proposal for a synthetic definition of the AP (section 6), which will finally lead to an evaluation of the role of the AP in the genesis both of the process of knowing and of the TRaumatic Doubt (section 7).

It is only after this process of refinement that the AP will become subject to radical criticism; these will be taken up in the next chapter.

IV.2 ARISTOTLE'S DICTUM[3]

As I've stated above, Aristotle's dictum should be interpreted quite differently from what we take it to be when we include it - under the label "Aristotelian Postulate" - among the necessary conditions for the TRaumatic Doubt. The issue can be approached by considering the common translation (T_C) of the AGS, that is:

---

3) This section is in debt to Burnyeat's article "Aristotle on Understanding Knowledge", where many of the contents here stated can be found articulated with great insight. If not differently specified, when I refer to him I'm always referring to this article.

T$_C$) "all men by nature desire to know".[4]

T$_C$ may be seen to contain all the reasons that can lead us to a premature identification of the possible contents of the AP with what Aristotle is really saying and therefore to a wrong definition of the former. On one hand T$_C$ may turn out to be rather misleading in rendering Aristotle's thought as this is expressed in his dictum, for it may give the impression that there is only a linguistic difference between AGS and the AP. And on the other hand, despite the fact that the assumption of T$_C$ is already a good way towards the identification of Aristotle's dictum with the AP, T$_C$ still remains too far from a full statement of the Aristotelian Postulate as this is needed in the formulation of the Traumatic Doubt. In other words, although in a different context T$_C$ is a somewhat adequate translation of Aristotle's dictum, here it fails to be satisfying as far as Aristotle is concerned, and yet it does not achieve the task of being a good definition of the AP.

The cause of this twofold inadequacy is to be drawn back to the meanings of the three Greek words *eidenai*, *oregontai* and *phusei*, generally translated respectively by "to know", "desire" and "by nature". Each has a specific meaning in Aristotle's dictum, to the effect that only the first two can be supposed to be employed in the AP with a reasonably similar meaning, while the latter brings such a value to the dictum as to represent the significant distinction that separates its the sense from that of the AP. A clarification of the deceptive approximation both of T$_C$ to Aristotle's dictum and, as a consequence, of this latter to the AP can be gained by a close investigation into the meanings of those same three words in question. In this way I shall introduce some considerations relevant to the definition of the AP. Let me proceed in the exposition by following the Greek order of occurrence.

---

4) Cf. Ross [1958], p.114 and his edition of *The Works of Aristotle*, 1960, vol. VIII (Aristotle's *Metaphysics*).

IV.2.a EIDENAI

It is largely recognized that the Greek thought was deeply influenced by visual metaphors,[5] and this is especially true in the field of theory of knowledge, for

> One of the common Greek ways to claim that I know was to use the verb *oida*, which, literally taken, amounts to saying that I *have seen* the thing [or event] in question.[6]

To put it roughly, in Greek the verb *eidenai*, the infinitive of *oida*, meant *to know on the basis of one's own observation*, while it seems to maintain a strong echo of a visual image, its root being semantically close to the verb *orao* "to see". However accurate this interpretation of the Greek word may be, it has been very convincingly argued[7] that, in Aristotle's case at any rate, the term must also be considered to contain somehow the equivalent meaning of the English word "to understand". More precisely, according to Burnyeat [1978] there is not a unique interpretation of *eidenai*, and its meaning should be rendered either by "to understand" or by "to know", depending on the context. Then, at least as far as *Met.I.I*,908a 21 is concerned, *eidenai* cannot be understood by *merely* referring to its philological meaning of "knowledge by acquaintance, or by direct visual apprehension". On the contrary, it has also been suggested, although this time not too satisfactorily,[8] that we should straightforwardly opt in favour of "to understand":

---

5) Cf. for example Snell [1953]
6) Hintikka [1974], p.58
7) Cf. Burnyeat [1978], especially p.104, where he says: "We may indeed be tempted to associate the contrast [between "to understand" and "to know"] directly with the horizontal dimension of the schema, setting our verb "understand" to represent *epistasthai*, our verb "know" to represent *ghignoskein* (and also *gnorizein*). Not only have no third verb which functions like *eidenai*, but it would in any case be misleading to think of *eidenai* as the expression of a third, generic concept to which the other two verbs are subordinated as species to a common genus; rather *eidenai* is to be regarded, according to context, as a synonymous replacement for *epistasthai* ["to know"] or for *ghignoskein* ["to understand"]* (*) [Burnyeat's Note] Even this is a simplification (cf. Lyons [1963]) but it holds, I think, for the Aristotelian constructions we need to consider.".
8) Cf. Lear [1988] p.6.

But if philosophy is the ultimate goal of our original innate desire, perhaps we have to re-think what that desire is. We are not satisfied to know, for example, that the heavens move in such a way; nor will we be satisfied to know a vast array of such facts about *phenomena* [my italics]. We want to know *why* the heavens move that way, why the phenomena are as they are. We are after more than knowledge, we are after understanding. Aristotle was, I belive, aware of this. Although "to know" is an adequate translation of the Greek *eidenai*, Aristotle used this term generically to cover various species of knowing[*]. One of the species is *epistasthai* (literally, to be in a state of having *episteme*) which has been often translated as "to know" or "to have scientific knowledge", but which *ought to be translated as "to understand"* [my italics]. For Aristotle says that we have *episteme* of a thing when we know its cause[**]. To have *episteme* one must not only know a thing, one must also *grasp* [my italics] its cause or explanation. This is to understand it: to know in a deep sense what it is and how it comes to be.
*) [Lear's note] See M.F. Burnyeat, "Aristotle on Understanding Knowledge".
**) [Lear's note] See e.g. *Posterior Analytics* I.2, 71b8-12

According to Lear, T_C could be improved by adopting the following translation:

T_1) "all men by nature desire *to understand*".

Unfortunately - as Lear recognizes, though he fails to draw the necessary consequence[9] - even if the equivalence:

D_{19}) "*eidenai* x" $=_{def.}$ "*epistasthai* x" $=_{def.}$ "to have *episteme* of x"

is correct, it remains the fact that, as he says, in order "to have *episteme* of x one must *not only* know x, one must *also* grasp its cause or explanation". This implies that, though insufficient, ""to know" x" is a necessary condition in order "to have *episteme* of x". This is to say that, to shift on the other side of the meaning of *eidenai* (i.e. to adopt "to understand") certainly won't help in maintaining the manifold sense of the Greek term, i.e. "to understand", "to see", "to know by direct observation or acquaintance", that yet must be included in the term.

This summarizes the state of scholarly work. If we refer now these remarks to our present task, I believe that in this context the best solution may be on the one hand simply that of bearing in mind that *eidenai* has these different meanings, and on the other hand, having given up the

9) But see [1988], chap. 2 parag. 2 entitled "Understanding and 'the why'".

idea of producing a fictitious English equivalent, of adopting the device
of labelling the conceptual area covered by *eidenai* by means of the
expression "to know-why"[10] thus:

$$D_{20}) \text{ "eidenai x" } =_{def.} \text{ "to know-why x"};$$

where "to know-why" is supposed to maintain the semantic value both of "to
know" and of "to understand", and in this latter sense in the same way as
"to see why" means "to understand why". In this way we will have that T_C is
improved thus:

$$T_2) \text{ "all men by nature desire } to \text{ } know\text{-}why\text{"}.$$

But what about the equivalences introduced by D_{19} ? First, let us
interpret *episteme* not simply as "scientific knowledge", as it is more
popularly proposed, but as "theoretical, rational knowledge", and then make
equal "theoretical, rational knowledge" to "objective knowledge". This
translation has its justification in the technical use made of "objective
knowledge" introduced above (cf. I.5.b), a use which I believe is closer to
the Aristotelian aim than any distinction between *scientific* and *non-
scientific* knowledge, which implies concepts unknown to the Greek
philosophers:[11]

$$D_{21}) \text{ episteme } =_{def.} \text{ theoretical, rational knowledge } =_{def.} \text{ objective knowledge;}$$

secondly, let us also endorse, tracing the same route, the following
equivalence:

$$D_{22}) \text{ } in \text{ } the \text{ } same \text{ } way \text{ } as \text{ "eidenai x" } =_{def.} \text{ "to have } episteme \text{ of x" so "to know-why x" } =_{def.} \text{ "to have objective knowledge-why of x";}$$

then we will have that a better[12] translation of Aristotle's dictum is:

$$T_3) \text{ "all men by nature desire } to \text{ } have \text{ } objective \text{ } knowledge\text{-}why\text{"}$$

---

10) Eventually this proposal could be supported by what is said in Burnyeat [1978], p.112, see
also Lear quoted above. Cf. Aristotle, *Metaphysics*, I,I 981a,25-981b 9.
11) Cf. for example the classification of types of knowledge in *Metaphysics* 1025b-1026a.
12) Obviously this "better" is relative to the context of this investigation.

This is probably all that can be done in order to elucidate the meaning of the word. But *eidenai*, as an epistemic term, also raises the problem of its reference, or more specifically the question of what the "x" in "eidenai of x" can stand for. It is necessary to make clear what for Aristotle may be the object of "objective knowledge-why", what we can have "objective knowledge-why" of, or about.

It is well known that Aristotle and more generally Greek philosophers,[13] claim that it is possible "to have *episteme*" only of *what cannot be otherwise*.[14] This seems to support the translation above introduced. For the thesis would appear affected by a serious lack of intelligibility if we were to stick to an interpretation of "*episteme*" as "scientific knowledge", but it becomes more acceptable[15] if, following Burnyeat [1978] once more, we regard "*episteme*" as also meaning "understanding", that is in this context (and according to D_{20}/D_{22}) "objective knowledge-why". As he says:

> "Understanding is constituted by knowing the explanation of necessary connections in nature (p.110) [...]. Aristotle too [the "too" alludes to Plato] has his vision of a complete understanding, and it is this that finally supports the claim that one can have "*episteme*" [i.e.knowledge-why] only of things universal, necessary and everlasting, not of things particular, perishable or accidental [...]. Aristotle is not saying, for example, that we cannot know what accidental states of affairs obtain in the world. His contention is that the accidental falls outside the reach of systematic explanation and understanding (pp.112-113).[16]

These few remarks can be summed up by re-translating Aristotle's dictum thus:

T_4) "all men by nature (*phusei*) desire (*oregontai*) to have objective knowledge-why of what cannot be otherwise".

We can now turn to the analysis of the second Greek term, *oregontai*.

---

13) Cf. again Hintikka [1974], chap.3.
18) Cf. *Posterior Analytics*, A 2, 71b 12, 15-16.
15) Yet not uncontroversial, as it is also recognized by Burnyeat himself (p.115). Cf. also what he says about the fallacy of deriving a *necessitas consequentis* from a *necessitas consequentiae*, on which the Aristotelian reasoning may be grounded (p.108 and ff., especially note 23).
16) Cf. Burnyeat's very interesting note 34, p.113 against Hintikka's interpretation of this same issue as it is exposed in [1973], chap.4 (but also in [1978] chapt.3).

IV.2.b OREGONTAI

In a very concrete sense the term *orego* - of which *oregontai* is simply the Present Indicative form, third person plural - means "reach", "stretch out for something", "stretch forth one's hand", "grasp at". It is because of this *dynamic sense* that it comes to have the common meaning of "to desire", which is that we find in Aristotle.[17] Note that we owe to this analogy between mental/spiritual states and physical/dynamic states the term "emotion", which contains the root "motion" within itself. "Oregontai" refers to a "movement of the soul". In covering the significance of "to desire" we must understand the Greek verb as implying a sort of *metaphorical tension* towards the object of the desire, an idea of *movement from man towards reality*. The enormous significance of this dynamic analogy will be clarified in the last section and will be a matter of discussion in V.7. At the moment, let me just bring to light the Aristotelian connection[18] between *oregontai* and its noun *orexis* or *orektikon*, "a general word for all kinds of appetency or conation (*horme*)" (Liddell, Scott [1940][19]). In Aristotle:

> The appetite (*orektikon*) is that faculty of the soul which *pursues* (A. De A. 431 a). It embraces the three functions of desire (*epithymia*), spirit, and which (ibid. 414b) and is, in conjunction with sensation (*aisthesis*) or intellection (*noesis*) the *ultimate cause of motion in the soul* (De An. 111,, 433a-b [...]). Aristotle general treatment of *orektikon* is in the De Motu anim. chapts. 6-8. (Peters [1967], p.146, my italics).

According to these specifications, I will translate *oregontai* not simply as "desire" but by means of a longer locution, viz. "have a conation which drives them towards", so to have:

T₅) "all men by nature (*phusei*) have a conation which drives them towards the acquisition of objective knowledge-why of what cannot be otherwise".

17) Cf. Aristotle's *Nichomachean Ethics*, 111 3a 12.
18) For this connection in Aristotle, cf. *Nichomachean Ethics* 119b 7; *De Anima* 414b 6.
19) Cf. Aristotle *De Anima* 414b 2 and 433a 13.

Once again, the reasons for adopting this more complex translation will be spelt out partially in sections IV.6/7 and chiefly in chapter five. At the moment we only need to focus on the last and most complex term.

IV.2.c *PHUSEI*

Until T_5 we may still be of the opinion that what we mean by the AP, insofar as this is involved in the TRaumatic Doubt, is in fact fairly represented by Aristotle's dictum. We may still find in this latter a clear understanding of the theoretical hypothesis that is at the root of the genesis of the process of knowing and that gives its negative aspect to the Perpetual Check. It is only when we try to understand the meaning of *phusei* better that this conviction falters. For it is this term that makes the Aristotelian dictum imply something quite different from the AP.

Linguistically, the word has the same semantic extension of the English expression "by nature", and yet in this context such a translation can too easily lead to think of "naturally", and from this to undervalue the important role that the term plays in the sentence, as if by T_5 Aristotle were merely saying: "*of course all men desire to know*". This would be a very inadequate understanding of his thought. For in fact, by *phusei* Aristotle means to refer to the whole state of the world,[20] as this is a complex set of ontologically interrelated elements forming an *intelligible* universe, whose characteristics interlock *harmoniously*. Hence, by means of the *phusei*-clause Aristotelian metaphysics is called into play. The expression "by nature" is to be interpreted as meaning "according to the intrinsic harmonious features of an intelligible universe". This has, at least, two enormous consequences. First, "by nature" conveys the notion that "to be a knowledge-why-seeker" is a *property* which goes together with

---

20) For this use of the dative of 'physis' cf. also Aristotle's *Politics*, 1253a 3, 'man by nature (*phusei*) is a social animal", and also ibid. 1254a 15.

that of "being a human being". And secondly, "by nature" indicates that this property is just the denoting characteristic of an element of the universe which therefore *must be compatible* with the rest of it. The point deserves a more detailed investigation.

IV.2.d ARISTOTLE'S PERSPECTIVE

Some principal aspects of Aristotle's metaphysical perspective, those condensed in that *phusei*, have found lively expression in Jonathan Lear's book. In his work on Aristotle which I've already had occasion to mention,[21] Lear synthesizes for us Aristotle's perspective thus:

[in *Metaphysics* I.I,980a 21] Aristotle is attributing to us a *desire*, a *force*, which urges us on *toward* knowledge (p.1, my italics).

Man is by nature a questioner of the world: he seeks to understand *why* the world is the way it is, the world for its part *reciprocates*: it "*answers*" man's question. (p.26, my italics))

Man has the generalized *ability to get at the bottom of things* he encounters in the world: to find out *what they are really like. It is the desire to understand that prompts man to engage in such inquiry*, and it is the deep understanding of the world that satisfies that desire. (p. 117, my italics)

Man is not born with knowledge, but he is born with the capacity to acquire it. But *the world must cooperate with him if he is to exercise this capacity*. (p.2, my italics)

The world prompts us to inquiry by presenting itself (to us) as puzzling, and then it obligingly yields up its truths in response to our patient investigations. The world as such *is meant to be known* (by beings like us) and it invites man to fulfil his role as a systematic undestander of the world. (p.7, [my italics])

[Aristotle's world] is *essentially intelligible*. It is a world that is so ordered, structured, *saturated with purposefulness that it is meant to be understood in the sense that it is man's nature to inquire into the world's order and come to understand it. If the world were not in this extended sense so mind-like, it would be impossible for man to understand it*. Our appreciation of purposefulness is not, for Aristotle, a projection of (human) mind onto nature; it is a projection of purposeful, intelligible, "mindful" nature onto the human mind. (p.41 [my italics]).

It is only because the world offers a course along which man's inquiries can run that his desire to know has any hope of being satisfied. (p.3)

Imagine how frustrating it would be to be born with the desire to understand in a world which did not cooperate ! (p.7)

---

21) Cf Lear [1988]. The title of his book *Aristotle, The Desire to Understand* is already unequivocally indicative, and in fact is an introduction to Aristotle's philosophy from the point of view of Aristotle's dictum.

It is easy to spell out the theoretical course followed by this collage of quotations: Aristotle attributes to us a desire to know, which is in perfect accord with what the world is made for, namely for being known. This is clear from the relation of the world with the human being, that of informing him about its own state. We just need to recall the inversion of the arrow operated by an Aristotelian/Thomistic/Lockean opposer of the Perpetual Circle in III.4.b. If on one side there is the desire to know that prompts HKS towards ER, this desire is not disappointed by ER, for there is also a movement of the world towards man, at the level of perception. There is not even the shadow of a possible dualism between ER^p and ER^n because there is no real distinction/opposition between subject and object, but only a *virtuous circle between knower and known*. As Thomas Aquinas said, centuries later, still echoing Aristotle:

> Knower and known are not agent and patient to one another, they are two things from which one principle of knowledge results. (*Disputations*, VIII, *De Veritate*, 7 ad 2).

The conclusion, left to the last quotation from Lear, is obvious: what would happen if the second arrow, that which goes from ER towards HKS, should disappear ? If the *harmony* of the universe, the *virtuous circle* between reality and man, should collapse ? We already know the answer to the question: the crisis of the Classic picture of the world and of man's place in it will raise the Traumatic conception of the Perpetual Check of Reason. But how the harmonious Aristotelian universe breaks into pieces will be referred to in due time (section IV.3). At the moment let me give the final translation of AGS:

T_6) "owing to the harmonious nature of the universe, all men have a satisfiable conation which drives them towards the acquisition of objective knowledge-why of what cannot be otherwise".

It should be clear now why I said that the "by nature" clause introduces an element in Aristotle's dictum that is radically incompatible with the so called Aristotelian Postulate. It is exactly because Aristotle

thinks that it is in the normal state of the world that HKS is interested in knowing ER and ER, being fully intelligible, is ready to be known (exactly because Aristotle says *phusei*) that he can at the same time assume the human desire to know and not to be faced by any form of Traumatic Doubt. One of the most important implications of the *phusei* clause is that it brings into the dictum the conception of a mutual, collaborating connection between the desire to know and the possibility of satisfying such desire, i.e. the intelligibility of ER. This is graphically shown by the two arrows representing the epistemic relation occurring between HKS and ER. As long as this connection and both components are left untouched there can be no danger of a gap between man and reality, between two realities, and between the desire to know and the impossibility of fulfilling such desire.

Other metaphysical aspects of Aristotle's perspective, retraceable to the introduction of *phusei* in Aristotle's dictum will deserve a closer look in the next chapter, but now I shall turn to the crucial issue of the historical development of T_6.

IV.3 ALBERT THE GREAT ON ARISTOTLE'S DICTUM

Every student of philosophy knows that in later medieval philosophy Aristotle is *The Philosopher*. This is a unique phenomenon that will never occur again in the history of philosophy, and the edition of the *Aristoteles Latinus*[22] gives an idea of the influence his thought may have had in those centuries. Obviously, to retrace the popularity of the *Metaphysics* and therefore the possible interpretations of his famous incipit throughout the Middle Age is not a task that can be accomplished in

22) *Aristoteles Latinus* is the scholar edition, started in 1939 of all the translations of Aristotle's works in the Middle Age, cf. Dod [1982].

this section, not even in a summary way.[23] Therefore, in this and in the following sections I will limit myself to only two principal authors, both extremely relevant to the present analysis of the AP, Albert the Great and *Thomas Aquinas*. Their commentaries on the *Metaphysics* contain important insights that will turn out useful for the final definition of the AP.

There are two interesting points about AGS that can be evinced by a close study of Albert the Great's Commentary:[24] the first concerns the introduction of the possibility of a slight modification of the meaning of *phusei* when this is translated into Latin, and the second concerns the way he understands the dictum, how he interprets its role in a theory of knowledge. Let me focus on them in turn by labelling them (A) and (B).

A) The most common Latin translation[25] of the AGS is:

$$T_L) \text{ "Omnes homines natura scire desiderant".}$$

As far as the terms *"desiderant"* and *"scire"* are concerned, T_L is to be understood in such a way that:

(i) we consider "desiderant" as having the same meaning of the Greek/English pair "oregontai/desire" above specified, that is as including the *metaphorical dynamic* aspect of "moving towards something"; and

(ii) we attribute to "scire" the same specific meaning attribute to *eidenai* in D_{20}, because, even if on the one hand "scire" may have the same degree of generality in Latin of *eidenai* in Greek and of "to know" in English, on the other hand "scire" must be presupposed as part of the Aristotelian perspective, and therefore in strict connection with the concept of *visual understanding* and with the everlasting aspect of ER as a reference (see

23) For this study see Doig [1972], especially chapter 1, about the fortune and the history of the manuscripts of the *Metaphysics*.
24) Cf. Albert the Great's *Metaphysica Libri Quinque Priores* published in [1960].
25) This is one of Albert the Great's way of rendering AGS. Cf. also Thomas Aquinas *In Metaphysicam Aristotelis Commentaria*, the *Translatio Anonima sive Media* in *Aristoteles Latinus* XXV.2 and *Translatio Iacobi sive 'Vetustissima' cum Scholiis et Translatio Composita sive 'Vetus', ibidem*, XXV-I-I.

below section .IV.4.b for Thomas Aquinas' use of the more specific verb *intelligere*).

Up to this point T_L can be translated into English by means of T_5. It is the different Latin translations of *phusei* that turns out to be interesting, for they produce a slight difference in T_L that can make it say something closer than AGS to our Aristotelian Postulate. For Albert the Great has three ways of rendering the Greek *phusei*: "natura", "naturale" and "naturaliter",[26] and the latter is interpretable as a further step towards the Aristotelian Postulate.

The use of "natura" is the more correct. It is the ablative form of the noun "natura" and generally it can be understood as standing for the longer locution: "in rerum natura esse", "it is in the nature of things". As for *phusei*, "natura" brings inside T_L the Aristotelian metaphysics of a harmonious universe enriched by "sympathies" among its components and spontaneous tendencies of potential states towards their actual fulfilments. It may be differently translated as "according to the natural course of events", "according to the way things happen" or "by the nature of things". By using this ablative[27] Albert the Great follows the Classic tradition. For example, Cicero says:

Natura inest in mentibus nostris [...] cupiditas veri videndi (*Tusculanae Disputationes*, my italics).

Which shows that, in paraphrasing Aristotle ("It *is in the nature of things* that in our minds there is an *inborn desire to see the truth*"), he uses the ablative "natura" to render *phusei*.

The second expression "naturale" is an adjective that Albert the Great uses in connection with the noun "desiderium" in the expression "naturale *sciendi desiderium*".[28] The significance of this version can be disregarded as being due only to the Latin construction of the sentence

---

26) Albert the Great, *op.cit.*, Lib.I, Tract. I chapt.s 4 and 5.
27) Cf. Albert the Great *op.cit.* I,I,4, 36-37 and ibid. 5, 83-84.
28) Cf. Albert the Great *op.cit.* both titles of I,I, chap.s 4 and 5.

(literally "[man has] a natural desire of knowing" instead of "[man] naturally desire to know").

It is the last expression that is the most interesting. "*Naturaliter*", being an adverb, is the exact Latin equivalent of "naturally". It occurs in a long sentence:

> Omnes igitur *homines*, per hoc quod sunt homines, per intellectum in specie et natura hominum constituti, <u>naturaliter</u> scire desiderant; (I, I, 4, 80-82), [my underlining].

Let me label this Latin translation of AGS T_L in order to remind us that is Albert's translation. In T_L we have the Latin translation of AGS put in italics, and this shows that *phusei* is translated by means of "naturaliter". The importance of this translation is connected with what I've said above about the risk inherent in understanding *phusei* as merely meaning "naturally" or "of course", without taking into account the metaphysical background implied by the expression. This shift seems now to be made even more possible by T_L. For in T_L the desire to know appears to be attributed to man as one of his principal properties without any connection with that second half of the issue, appropriately implied by the Aristotelian use of *phusei*, that could render this attribution of the desire to know to man non-problematic, namely the "collaboration" of the universe to fulfil this desire. According to T_L it is the desire to know that becomes natural (cf. Albert the Great's previous use of the Latin adjective). The *natural desire to know* characterises the peculiarity of that creature that is man in the sense that, as Albert the Great says, men desire to know "per hoc quod sunt homines", "in so far as they are men" ("qua men"), apparently no matter what the structure or the purpose of the rest of the universe is. It is worth noticing that it is proper to Latin (but not to Greek) to allow the translation of "naturaliter" as "spontaneously".[29]

---

29) For Aristotle's concept of 'what is spontaneous' as '*to automaton*' Lear [1988], p.36.

On the basis of L_A let me improve our understanding of AGS by adding a new clause to T_6:

T_7) "(owing to the harmonious nature of the universe) all men have a (spontaneous and satisfiable) conation which drives them towards the acquisition of objective knowledge-why of what cannot be otherwise".

The use of the brackets underlines the fact that in T_7 the metaphysical perspective remains implicit, for T_7 is getting closer to an anthropological statement that defines only the nature of a human being, being at the same time "ontologically neutral".

Although the formulation of T_7 is certainly a way of forcing Albert the Great to say much more than he is really willing to say in T_L, yet, T_L does in fact increase the possibility of distinguishing between the desire to know as a property of human beings - or better as a prerequisite for an animal to be considered a human being - and the whole metaphysical picture in which this desire must be considered if it is not to give rise to the TRaumatic Doubt.[30] Certainly the perspective from which Albert the Great sees the relation between man and the universe is still the Aristotelian perspective, but in T_L it remains implicit, it merely underlies the vision of man, and in this way it may come to be disregarded, once the harmony between subject and object is broken by a Cartesian demon.

B) The second interesting indication that can be gained from Albert the Great's *Comment on the Metaphysics* concerns the interpretation that he gives of the "pure desire to know". This is defined by entitling the fourth chapter:

> De primo principio generativo scientiae ex parte nostra, quod est naturale sciendi desiderium (I,I, chap. 4, my italics).

In commenting on AGS Albert the Great feels the necessity of introducing it as "*the first principle of the genesis of knowledge from our*

---

30) In agreement with this interpretation Albert the Great ends the fourth chapter by saying: "Sic igitur necessario concluditur, quod *omnes homines natura scire desiderant*. Cum enim hoc desiderium sit omnium quorum in specie determinata est natura una, erit hoc *desiderium naturale* et naturam speciei consequens." (*op.cit.*,I,I,4,36-40, my italics).

side". The idea is that the genesis of the process of knowing which leads to the production of objective knowledge i.e. "scientia" lies in human desire to know for the sake of knowledge. In adding the proviso "ex parte nostra" ("from our side") Albert the Great is probably thinking about the other *conditio sine qua non* for the production of knowledge, namely the presence of intelligible external reality. Albert the Great wouldn't take the mere presence of ER as a *necessary* condition for the activation of the process of knowing, claiming perhaps instead the necessity of some sort of ontic contribution - maybe in terms of some activity of ER on HKS'senses or an ontic disposition to be known by HKS - as the additional *ratio essendi* of the genesis of the process of knowing. However this may be, it is interesting to note that he recognizes the Aristotelian dictum as presenting the *subjective ratio essendi* of the genesis of the process of knowing. I shall make some use of this characterization in section IV.6. Let us now turn to the other outstanding medieval philosopher we shall be concerned with, Thomas Aquinas.

IV.4 THOMAS AQUINAS ON ARISTOTLE'S DICTUM

Most of what I've already said about Albert the Great is equally valid for his pupil Thomas Aquinas. Hence, I shall presuppose T_7 and use Thomas Aquinas' *Commentary*[31] on Aristotle's *Metaphysics* to introduce only two additional considerations.

The first consideration still concerns the line of development emerging from *phusei* to "spontaneously" *via* "naturaliter". According to many interpreters[32] Thomas Aquinas is to be understood as reinforcing the

---

31) Cf. Thomas Aquinas *op.cit.*
32) Alcorta [1960], Coccio [1960], Rossi [1974], Neri [1974] specifically about Thomas Aquinas, but see also from a Neoscholastic point of view e.g. Van Steenberghen [1970], Part II, chap. 5, Maritain [1928], Chap.2 and Maritain [1938], and more objectively Gallagher [1982], which starts the discussion of the nature of philosophy of knowledge by (oddly) putting the Aristotelian dictum in contrast with the Socratic awareness of being ignorant.

idea that man has a *spontaneous tendency towards knowledge*, quite apart from the status of the rest of the universe. This "spontaneity" would make the *conation* towards knowledge resemble a sort of first *self-mover*: apparently the process of knowing, whose first genetic principle is the desire to know, would have a free, unforced start, at least in so far as the highest expressions of knowledge are concerned (this is to say, apart from what is due to the animal "epistemic" interest that aims to mere physical survival).[33] This concept of *self-mover* or, referring to the metaphor of the game of chess, the idea that HKS is playing with the white, has its distinctive expression in Aquinas' concept of *vis cognoscitiva*:

> Quanto enim aliqua *vis cognoscitiva* est immatelior, tanto est perfectior in cognoscendo (Thomas Aquinas [1820], I,I, 6 [my italics]).[34]

A clear understanding of what may be meant by this *vis cognoscitiva*[35] can be gained in a very interesting passage by Van Steenberghen [1970], a Neoscholastic manual of Epistemology. Let me quote it at length:

> The knowing subject appears to consciousness as a *real tendency* or *real appetite for knowing*, that is, for becoming, possessing, or being the objects as much as possible [this refers to the Aristotelian/Scholastic concept of ilomorphic knowledge]. [...] We have said that the "subject" or "self" it shows itself to be an element of consciousness which is not reducible to the "object", because it shows itself to be a conscious tendency an appetite, a desire, a need which has to be satisfied, a tendency which gives to consciousness a *certain irreversible direction or orientation from the subject to the object, that is towards that which is alone the content of consciousness, the term of knowledge* [my italics]. This experiencing of a tendency is again a primitive, original

---

33) This interpretation of the Aristotelian concept of mind as a "self-mover" has been defended by Wedin [1988], chap. 6, section 3 ("Mind as a self-mover"). See below Section IV.5.c and also next chapter.

34) "The more a will/desire to know is immaterial, the better is its application in the process of knowing", where "vis cognoscitiva" refers to the natural, human desire to know.

35) The adjective "*cognoscitivus*" is unknown to Classic Latin (cf. the *Oxford Latin Dictionary*) and it is not very common in Medieval Latin either: e.g. it is not listed in the *Mediae Latinitatis Lexicon Minus* (Niermeyer [1976]). According to the *Revised Medieval Latin Word-List from British and Irish Sources* (Latham [1965]) it starts being used only in the XIII century in order to mean "concerned with knowledge, cognitive" (cf. also the *Revised Medieval Latin Word-List from British Sources* (Latham [1981], Fascicule II) which says that the term occurs for the first time in Robert Grosseteste [1235-53] and then in Roger Bacon). In the *Corpus Christianorum Continuatio Medievalis Lexico Latinitatis Medii aevi* (Blaise [1975]) we find that "*Virtus or Facultas cognoscitiva*" is first used by Thomas Aquinas. So, although Thomas Aquinas [1225?-1274] used the expression *vis cognoscitiva* quite commonly (see below), he was adapting Classic Latin to his purposes, giving rise to a sort of neologism. English translators render it by the expression "cognitive power".

irreducible and therefore indefinable datum. "To tend" or "to desire" is a _certain_ "way of being" that I find in myself. It implies a _certain_ "lack of being" and a _certain_ capacity for more being to fill up this privation. (p. 101) [...]. [The presence of the object] does not exclude the subject's *spontaneity*. Its curiosity constantly tends to something beyond the object apprehended. (p.102) [...] [But at the end] My knowledge is therefore an activity, and it is an immanent activity, that is a *movement* which takes place in me and terminates in me. It proceeds from me (from my capacity, my tendency, my potency) [it goes out to grasp the object and coming back] it remains in me (constituting me, making me myself) (p.106-107, my underlining).

Apart from the introduction of the vague clause "certain" precisely whenever we would like to know more about the *specificandum*, and disregarding the questionable appeal to an analogical and descriptive use of language this long citation throws a vivid light on the basic idea of a *vis cognoscitiva* and the dynamic image that underlies it. If in Aristotle there still is a relaxed use of "*orexis*" as a synonym of "*horme*", in the Scholastic version the adoption of "desire" in terms of "*vis cognoscitiva*" points to a more specified use: the natural desire to know becomes a spontaneous, almost *physically dynamic*, tendency towards *knowledge*, a tendency which can be in fact no longer related to the general status of the rest of the universe.[36] Knowing is a natural movement towards the kingdom of a-temporal, immutable truths.

Certainly, as in the case of Albert the Great, still in Thomas Aquinas there is the optimistic background of a mutual relation between HKS and ER, of an agreement between Knowledge and Being. The metaphysical perspective is still that:

"[...] cum naturale desiderium (for knowledge) vanum esse non possit" (I,I,4).[37]

36) So Thomas Aquinas in *Summa Theologiae* states that "Vis cognoscitiva est motiva" (I, 81 1 and 2) and that "Vis cognoscitiva movet appetitivam representando ei suum objectum" (I,II,40-8). A note to this text in the English edition of 1965 says: "We thus [i.e psychological tendency] translate *extensio appetitus* [which is the effect of the *vis cognoscitiva*] and variants thereof: the movement spoken of is mental, psychic, immanent, at least essentially and primarily. It may be, and is a matter of course, followed by an actual physical or bodily movement." (cf. Reid [1965], note b, pp.6-7, vol. XXI 1a2ae 40-48).
37) "Since the natural desire for knowledge cannot be vain [i.e. "unfulfillable"]". The same position, almost word by word is already present in Albert the Great, *op.cit.* I,I,4, 20-25.

For Thomas Aquinas a human being is such if and only if he has this striving for knowledge, only if he is a *knowledge-seeker*, for:

> Propria autem operatio hominis inquantum homo, est intelligere. Per hoc enim ab omnibus aliis differt. Unde naturaliter desiderium hominis inclinatur ad intelligendum, et per consequences ad sciendum, (I,I,2).[38]

Thomas Aquinas' translation of *phusei* by means of "natura" is still to be seen as referring to the Aristotelian sense "owing to the harmonious nature of the universe".[39] Yet, from the Thomistic way of interpreting the Aristotelian dictum there seems to emerge almost a *hypostatization* of the free desire to know into a *spontaneous vis cognoscitiva*, of a *mental tension* into a *physical force* which, being rather independent of the state of the universe, almost physically constrains human beings towards the acquisition of knowledge.[40]

The second remark I wish to make concerns Thomas Aquinas' use of the verb "intelligere".[41] According to the quotation above, for Thomas Aquinas the most human of all activity is that of "intelligere". Now "intelligere" has a more specified use than "scire". "Intelligere" is used to mean "quasi *intus legere* external reality" ("almost read into external reality").[42] In its etymological sense "intelligere" is closer to "understanding" than simply "scire", and Thomas Aquinas uses it in order to translate *eidenai* more precisely, that is in order to refer to "intellectual knowledge".[43] We know from what I've said above in IV.2.a that man is supposed to be interested in "knowledge-why". By using "intelligere" to render "eidenai/

---

38) 'The activity of knowing is proper of man in so far as he is a man. For which he differs from all the others. Hence by nature the human desire is inclined towards knowledge and, as a consequence towards science'.

39) This is for example the way Dante understands Aristotle through Thomas Aquinas in his *Divina Commedia*, *Inferno*, XXVI, 118-120 (cf. Musa [1971]) and in *Il Convivio*, I,1.

40) The danger of such an hypostatization, still present in Aristotle, is very clear in Plato's theory of Love as a minor God or 'daimon' in the *Symposium*, 202d-205c. See VI.5.a for some remarks on Plato's position on this issue.

41) Most of what I say is scholarly based on Doig [1972], Part III, section 2 'Intellectual Knowledge'.

42) Cf. Doig [1972], p.354, who refers to *Summa Thelogiae*.

43) By using 'intelligere' the result is that Aristotle's dictum would sound as a plain truism, for all men desire to *know* (*intelligere*) what in itself is already *knowable* (i.e. a universe which is *intelligible*). The theoretical force of the 'phusei' clause couldn't be more evident.

knowledge-why", Thomas Aquinas can now be seen to stress a particular sense of this "knowledge-why". For "intelligere" conjoins the sense of *moving towards things* with the idea of entering into them and seizing what really supports or explains sensible knowledge, as if there were a veil one should go through in order to grasp the intrinsic nature of ER. And this of course represent a sort of introduction to a dualism between how things may appear to be and how things really are. Even if

> it is very essential that we not mistake this view of knowledge as implying a return [sic] to the Kantian opposition between "thing in itself" and "appearance". [for] When Aquinas speaks of understanding [i.e. "*intelligere*"] he wishes to say, not that we grasp some superficial aspect of things, nor even something that is hidden at the centre of things behind the appearance [...] [but rather to say that] to understand is to seize whatever a thing may be. In other words to deny [sic] the legitimacy of the Kantian distinction. (Doig [1972], p.355)

yet it is undeniable that the introduction of "intelligere" creates the impression of a hidden dualism between *intrinsic* and *apparent properties* of external reality. The fact that until Kant this dualism will remain covered should not prevent us from making a further step towards the formulation of the Aristotelian Postulate by reading AGS thus:

T$_8$) "(owing to the harmonious nature of the universe) all men have a (spontaneous and satisfiable) conation which drives them towards the acquisition of objective knowledge-why of the intrinsic nature of what cannot be otherwise".

IV.5 DESCARTES AND ARISTOTLE'S DICTUM

By now it should be clear that the main difference between Aristotle's dictum and the Aristotelian Postulate remains the strict, harmonious conjunction occurring between the human desire to know and the intelligibility of external reality, represented by the "*phusei*" clause occurring in Aristotle's dictum. I've already mentioned above that the peak of the crisis of this harmonious state of things occurred when the harmony

was shattered by a Cartesian discord. There might be several reasons why the fracture between *vis cognoscitiva* and the intelligible nature of the world reaches its critical stage, although certainly not its full development, in Descartes. A list of the main factors that have been certainly influential in this process should include the following considerations:

i) it is in Descartes' century that the scientific revolution starts in terms of mathematization of the observed phenomena, and this will lead to a clear division between everyday reality and reality as it is known by a scientist;[44]

ii) Descartes inaugurates the procedure of the methodological doubt, i.e. of radically challenging the reality of the external world on a purely logical basis (the hypothesis of a misleading demon);[45]

iii) it is with Descartes that the tendency starts of considering knowledge as an indirect awareness of mental states; this will lead to a separation between *mental and physical worlds;*

iv) after the crisis of the isomorphic conception of knowledge, which is to be tied with that of the Aristotelian metaphysics from Ockham to Cusanus, it is with Descartes that the Platonistic tendency of grounding knowledge on a *subjective* justification of beliefs according to epistemological internal criteria has a strong revival.[46]

However, it is important to underline that, strictly speaking, the mutual agreement between *vis cognoscitiva* and knowability of external

---

44) Cf. Koyre' [1944], especially pp.74-84 for Descartes' influence in the history of human scientific vision of the world.

45) An articulated discussion of this aspect can be found in Stroud [1984], chapter I, about the problem of the existence of an external world, and in Burnyeat [1982], a brilliant article on the more radical nature of Descartes scepticism in respect to ancient versions.

46) I believe that i/iv can be summarised by saying that the fracture between *vis cognoscitiva* and knowability of the world starts when philosophy changes from being mainly metaphysical to being mainly epistemological, but this of course is just a general statement of the perspective from where the issue could be analysed and here I won't attempt to be more detailed, for all I need to state is *how* Descartes interprets Aristotle's dictum and then whether the origin of the fracture can be referred to his position.

reality is still granted in Descartes. In one of his unpublished works[47] we can read the following dialogue:

> *Polyander:* [...] I shall regret my ignorance for the rest of my life if I do not learn anything through my association with you.
> *Epistemon:* The best thing I can tell you on this topic is that *the desire for knowledge, which is common to all men, is an illness which cannot be cured, for curiosity grows with learning.* [...].
> *Eudoxus* [Descartes]: Is it possible, Epistemon, that you, with all your learning are persuaded that nature can contain a malady *so universal without also providing a remedy for it* ? For my part, just as I think that each land has enough fruits and rivers to satisfy the hunger and thirst of all its inhabitants, so too *I think that enough truth can be known in each subject to satisfy amply the curiosity of orderly souls.* (Descartes [1984], p.402).

This is the very beginning of the dialogue, and the parallel between the desire to know and hunger, and how nature has provided all the means to fully satisfy both of them, is only a ploy to introduce the "*cogito ergo sum*" as a means of justifying knowledge by internal criteria of clarity and certainty, as "the food" which will satisfy any "epistemologically hungry soul". But the purpose and the development of this introduction is not what interests us here. The central point is that this short passage shows what Descartes' attitude towards the desire to know is: the desire to know *must be supposed* to go together with the possibility of knowing external reality. Although Descartes means to save the harmony between the two elements, it is indicative that in this dialogue we encounter for the first time the possibility of a more problematic relation between the desire to know and the possibility of fulfilling it. It is as if Descartes were pondering the possibility of assuming the Aristotelian Postulate without the metaphysical implications contained in Aristotle's dictum (without taking into account the *phusei*) and in the *end* decided not to accept the possibility of a desire for knowledge *independent* of any natural tendency

---

47) It is the 'Search for Truth by means of the Natural Light' first published in 1701 and now in Descartes [1984], vol.II pp. 400-20. Many conjectures have been made about the date of its composition, but since it has been dated any time from the earlier to the later years of Descartes' life it can be inferred that the contents of the dialogue represent a position which is not proper of a particular time in the development of Descartes' thought, but rather one that he shared all through his life. For more information about the dialogue see the Translator's preface, p.400. As it is said there 'Eudoxus [...] is the mouthpiece of Descartes' own views'.

of the universe to satisfy it. We know that more generally Descartes hesitates on the verge of his dualism between *ordo rerum* and *ordo idearum* but still resolves it by means of an appeal to God, who won't deceive us. As in the Scholastic tradition, it is God who ensures that the desire to know will be satisfiable by the nature of external reality. And yet, it is Descartes who is preparing the field for the bankrupting of what will afterwards be called the *anthropocentric conception of the universe*. Although *not yet in* Descartes himself, it is *with* Descartes that the Perpetual Check of Reason begins to appear as the vital challenge for modern epistemology. As Cassirer [1951] has put it:

> [in Descartes] Reason, as the system of clear and distinct ideas, and the world, as the totality of created being, can nowhere fail to harmonize; for they merely represent different versions or different expressions of the same essence. The "archetypal intellect" of God thus becomes the bond between thinking and being, between truth and reality in the philosophy of Descartes. [...] In the development beyond Descartes all immediate connection between reality and the human mind, between thinking substance and extended substance is denied and completely broken off. There is no union between soul and body, between our ideas and reality, except that which is given or produced by the being of God. (p.97)[48]

When the "theological glue" melts under the light of the "Enlightenment", the dualism between *vis cognoscitiva* and knowability of external reality, between ER^p and ER^n, will be carried to the extreme. Caton's interpretation is along these lines:

> Throughout this essay we have emphasized Descartes's agreement with Aristotle that philosophy [i.e. knowledge in its highest level] *attempts to know things exactly as they are. But the ambiguities of his position invite a Kantian interpretation along the following lines.* Descartes's methodological beginning signifies rejection of the ontological orientation that is intent upon knowing the world as it is; instead, one is content with an epistemological orientation whose criterion is certitude commensurate with the subjective conditions of knowledge. The doctrine of the creation of eternal truths is the metaphysical correlate of the methodological foundation. *God might have created a world whose principle is not extension, a world, therefore, unknowable to reason.* The creating God, a correlate of the creating mind, functions as a limiting concept that enables reason to grasp *the limits of knowledge with complete clarity;* it accordingly enables us to embrace with equanimity the necessities of reason even though they are unfounded in the things in themselves. We have rejected this interpretation because Descartes associates the creating God with the anti-science of the biblical God, both of which are incompatible with the veracious God. *It is nevertheless true that the ambiguities of the Cartesian*

---

48) Cf. also Cassirer [1963], chapter 4 'The Subject-Object problem in the Philosophy of Renaissance'.

foundation are truly such as to lead to the transformation of the veracious God or creating God into an unknowable Ding an Sich and the associated distinction between phenomenon and noumenon.
) [Caton's note] Rosen has called attention to these ambiguities in Rosen [1969], pp. 29-34.
(Caton [1973], p.201 [my italics]).

What makes Descartes'position different from those classic and medieval is that his harmony between knower and known is assumed a *posteriori*, is first challenged and then re-established, in other words is critically accepted as problematic. It makes all the difference to say that there is a strict harmony between desire to know and intelligibility of the universe because there is no real distinction between the two, because there is not even a clear distinction, let alone an opposition, between subject and object, because we simply don't think that things could be otherwise, and to say that on the one hand there is a *vis cognoscitiva* that moves the human knowing subject, on the other hand there is a world that is the target of that *vis* and in the middle there is an harmoniser God who conciliates the former with the latter and *vice versa*, granting the possibility of knowledge. This second position is that obtained after the application of the methodological doubt, and it has in itself its own end, for it already contains an internal tension which will split the harmonic monism into a dualism between knowledge and reality, the reality as we take it and the reality as it is in itself.[49] For, although Descartes-Eudoxus still rejects the possibility of a *vis cognoscitiva intrinsically unsatisfiable by the ontological status of the world*, by taking into consideration the possibility of a *vis cognoscitiva independent of any further ontological order of the world*, he eventually opens the way to the Kantian dualism between reality in itself and phenomenal reality, and therefore to the frustration of the desire to know how things really are in

---

49) No wonder then that Descartes is the main polemic reference of Neoscholastic authors like Maritain (but see also the previously quoted Van Steenberghen [1970]): "With this theory of representational ideas the claims of Cartesian reason to independence of external objects reach their highest point: *thought breaks with Being*.[...] Here again *Kant finishes Descartes' work*. If the intelligence when it thinks, reaches immediately only its own thought, or its representations, the thing hidden behind these representations remains for ever unknowable." (Maritain [1928] p.78, my italics).

themselves. All through the modern age the process will be slow but continuous. For the harmony between the desire to know and the intelligibility of the universe relies on the presupposition that there is something like a *vis cognoscitiva* operating in a HKS, that this *vis cognoscitiva* cannot be in itself unsatisfiable, and that in fact it is satisfiable because external reality in itself is knowable. But the knowability of external reality is a result of a certain epistemology, and exactly that force, viz. the methodological doubt, which has brought epistemology to the level of *philosophia prima*, will also determine, through the radical Humian scepticism, the end of the harmonious state between *vis cognoscitiva* and intelligibility of external reality. When, with Kant, epistemology will give up any attempt to defend the full knowability of external reality in itself, then the harmony between *vis cognoscitiva* and the nature of external reality will collapse and the desire to know will remain a human tendency towards an impossible knowledge of noumenal reality. After a tradition of more than two thousand years in which man has been supposed to be a *satisfiable knowledge-seeker*, Kant will be forced to reinterpret the desire to know the intrinsic nature of external reality no longer in terms of an ontologically justified desire for knowledge but epistemologically, in terms of a *regulative use of the ideas of reason*. This will open a completely different chapter in the history of philosophy.[50]

The final result of the fracture between *vis cognoscitiva* and the ontological status of the world is to be understood in terms of a further stress on the interpretation of *phusei/naturaliter* as "spontaneously". Husserl refers to the Cartesian doubt as the way of putting into brackets the world as we take it to be, all our assumptions and the naive view we

---

50) From the prospective of the dissolution of the harmony between knower and known, it is the Kantian revolution that makes possible a new form of philosophy unknown to Greek or Medieval philosophers, namely German idealism and its developments, cf. Burnyeat [1980].

have of external reality, in order to acquire a fresh starting point in our epistemological investigation. This action of "putting the world into brackets" can be taken now as being more than a mere metaphor. For T_8 really already *bracketed* both the "owing to the harmonious nature of the universe" and the "satisfiable" clause. After the Cartesian revolution, what we remain with is a pure desire to know, independent of how things may stand in the universe.[51] This is the Aristotelian Postulate as it works in the Traumatic Doubt how I shall define it in the next section.

IV.6 A DEFINITION OF THE ARISTOTELIAN POSTULATE

Let me first remind you the general context in which the Aristotelian Postulate has to be placed.

The *Perpetual Check of Reason* is due ontologically to the *Antihumanist Principle*, epistemologically to the *Anthropocentric Predicament*. When united to the *Aristotelian Postulate* the PCR give rise to the *Traumatic Doubt*. The former sections of this chapter have cast some light on the theoretical position maintained by the AP and at this point it has become easy to give a satisfying formulation of the Aristotelian Postulate. Recalling T_8, it is sufficient to eliminate the clauses "owing to the harmonious nature of the universe" and "satisfiable" and put "spontaneous" out of the brackets to have:

> D_{23}) the Aristotelian Postulate (AP) holds that: "all men have a spontaneous conation which drives them towards the acquisition of objective knowledge-why of the intrinsic nature of what cannot be otherwise".

Although D_{23} furnishes a clear statement of the hypothesis supported by AP, it still maintains a strong Aristotelian taste, and according to different authors some devices would be required in order to adapt the AP

---

51) I suspect that Husserl's assumption of the concept of intentionality as what remains after the "bracketing of the world" (*epoche'*) mirrors somewhat closely the assumption of the Aristotelian Postulate by our Traumatic Doubt.

to their epistemologies. In our case, since the Perpetual Check of Reason
has turned out to be basically a post-Cartesian problem it will be better
to work with a more updated version of it:

D$_{24}$) (a post-Cartesian version of) the Aristotelian Postulate (AP) holds
that: "all men have a spontaneous conation which drives them towards the
acquisition of objective knowledge-why of the intrinsic nature of external
reality".[52]

I shall devote the rest of this section to some preliminary
commentaries on D$_{24}$.

IV.6.a EPISTEMOPHILIA

In trying to explain what Aristotle means by his dictum, Lear refers
to the desire of knowledge (or the conatus[53] towards knowledge, according
to D$_{24}$) by means of the term *epistemophilia* or *love of episteme*. For the
use of this term, which is higly apt,[54] he is indebted to a famous British
psychoanalyst, Klein,[55] and indeed the term seems a very useful one, even
if probably for different reasons from those appreciated by Lear. In
psychoanalysis *epistemophilia* is used to refer to:

---

52) The updated version (D$_{24}$) is less different from the Aristotelian (D$_{23}$) than it seems to
be. This because in both cases what the AP is suggesting is that man is interested in what is
the real nature of the last component of the world. The difference is that for an Aristotle-
like approach this is to be identified with what is immutable, while in our post-Cartesian
case we can accept a position with a lower degree of theoretical implications, by leaving
indeterminate what is this last essential core of ER.
53) The Latin term *conatus* can have two different meanings, depending on whether it is used in
an Aristotelian-like context, as here, or in a more inertially-orientated context, as in VI.3
and ff.. Although a bit misleading, I've decided to use the same term in both cases in order
to indicate a kind of continuity presents in the development of the conception of the genesis
of the of P-knowing. In any case, some similar distinction would be necessary also for
"impulse", as a force or influence exercised upon the mind by same external stimulus, and
"impulse" as an incitement or stimulus to action arising from some internal stet of mind. For
a brief summary of the development of the term cf. chapter VI.
54) So Lear [1988], p.3 and p.7 says: *"Epistemophilia [...] turns out to be a remarkably apt
expression for the inner drive which motivates a child's first exploration of the world. But
if the true content of a desire is revealed only by what ultimately satisfies it, then it is
too constricting to conceive of epistemophilia as innate curiosity or even desire for
knowledge: the desire is for episteme, or understanding."* [my italics]
55) Cf. Lear [1988], note 7 where is quoted Klein [1981]. Klein was strongly interested in the
psychology of children and it is in connection with this interest that she speaks of
epistemophilia.

the love of knowledge; the impulse to investigate and inquire. [In Psychoanalysis] the impulse is believed to develop out of an interest in the sex organs, particularly during the phallic phase. (Goldenson [1984], p.263).[56]

and according to Freud[57] in extreme cases the person who has an epistemophilic impulse can be led to experience the reaching of a successful conclusion to a line of thought, for example the solution of a scientific problem, in terms of a sexual satisfaction. On the other hand, the

"epistemophilic needs may also be warded off by defense mechanisms which lead to such symptoms as obsessional brooding or depersonalization. (Eidelberg [1968], p.130).

It is interesting to underline these aspects of the issue not because I mean to endorse a psychoanalytic view of the AP,[58] but rather because they render explicit three important questions entailed by D_{24}:

i) first of all, in speaking of the vis cognoscitiva in terms of epistemophilia, we may come to suspect that the Descartes-Epistemon's position that "the desire for knowledge, which is common to all men, is an illness" can have a more reasonable ground than it seemed above. In particular, we may come to think that the attribution of a vis cognoscitiva to man is not an unproblematic operation, but that it may imply possible counter-indications. If the phenomenon of epistemophilia may turn out to be a sort of Cartesian malady the superficial attribution to man of a desire to know becomes more controversial; in other words, we may feel in need of a more careful analysis before assuming the validity of the AP, before endorsing the view that the intrinsic nature of man is in fact that of a knowledge-seeker;

ii) secondly, the term epistemophilia, by implying a general meaning of love of knowledge, raises the question of how far this love of knowledge is

---

56) In the same way Wolman [1973], p.125: "love of knowledge and for the investigation into things".
57) Cf. Eidelberg [1968], p.130, and Freud [1953-], vol. 10, p.245 and vol.16, p.327.
58) It is interesting to note that Freud, in the pages previously quoted, elaborates the concept of epistemophilia in conjunction with that of scopophilia ("desire to see") in a way that is very close to the Aristotelian explanation of why and in what sense "all men by nature desire to know" (cf. next chapter, section 3).

distinguishable from "curiosity", and from an interest in knowledge due to the scope of mere survival;

iii) finally, by referring to an "*impulse* to investigate and inquire", the term *epistemophilia* raises the question whether in the AP we are facing a real *inborn impulse*, an *unlearned drive*, a *spontaneous conatus*, or rather an answer, an induced activity due to other factors, motivated by a previous process. In Aristotelian terminology, whether knowing is a natural or a violent movement.

The first question doesn't need any further explanations, but rather some discussion, and this will be a concern for the next chapter. The second and third questions call for a clarification which I shall give in due course. In this way I'll be able to specify first in what sense the *vis cognoscitiva* is different from *curiosity* and from *survival-interest for knowledge* and then one of its main characteristic, namely that of being presented as a *spontaneous conatus*.

IV.6.b ANIMAL INSTINCTIVE INTEREST IN KNOWLEDGE AND CURIOSITY

It is easy to recognize that members of the family of expressions regarding *the desire to know* - like *tou eidenai oregontai*, *intelligere/scire desiderant*, *vis cognoscitiva*, *spontaneous conatus*, *intellectual knowledge*, *knowledge-why*, *epistemophilia* - all refer to an interest in *knowing* which goes far beyond the basic level of animal instinctive interest in knowledge. This latter can be connoted as a vital interest of an animal in certain bits of information necessary to its survival in an hostile environment. The animal must posses such an interest in all the empirical knowledge that is vital for his survival, because it is only by means of this inborn tendency towards knowledge that he has some chance to stand the natural selection. The animal world as we know it is the result of such an instinctive capacity to apprehend certain basic,

vital information. But this instinctive interest in knowing goes only as far as the needs for a more secure life require it, never beyond. It will never promote pure research for the sake of knowledge. Philosophy, to give a celebrated and circular example, will never be the result of an instinctive interest in knowledge useful for survival. Surely there is a certain relation between the human phenomenon of *epistemophilia*, as this is presented by the AP, and the animal instinct, for both emerge as forces that drive the animal towards[59] the acquisition of a certain kind of knowledge.[60] Yet, what differentiates them is much more: the *ends* of the investigation, the kind of knowledge is sought, the way in which and the reasons why it is pursued.[61]

For these very same reasons, it is more difficult to distinguish the *vis cognoscitiva* from mere curiosity. For if in the former case it is already sufficient to call our attention to the distinction between "knowledge for knowledge" and "knowledge for something else", this is not enough in respect to the concept of curiosity. This latter cannot be identified with practical interests and indeed very often, especially in psychology, *curiosity* and *epistemophilia* are treated as the same psychological phenomenon.[62] The only distinction that is drawn is rather

---

59) The importance of the connection between the concept of *conatus* and that of *instinct to survive*, will be matter of some more detailed discussion in the last chapter, with a reference to Spinoza (VI.4.a).

60) I think it is very tempting to produce a sort of hierarchy of *stimuli* that motivate a human being to know, from the more natural, finalized to his survival, to the more intellectual, finalized to pure knowledge, via curiosity as a middle stage. Yet, this picture, however useful for heuristic purposes ay be, would be largely inadequate if taken too seriously. The three 'forces' are interwoven together, and it will be even difficult to distinguish their influence in each single case of knowing-activity, let alone to produce an abstract classification of their domains. Cf. again Hume [1967] (quoted above).

61) Then we can read in Gregory [1987], p.410: "There is 'useless' knowledge such as which is the third or the thirteenth longest river of the world; on the other hand there is also knowledge that far transcends even what is necessary for immediate survival. It is on this latter that civilization's future depends, and in our possession of it we are, surely, outside the biological steam of natural selection."

62) This is the case for example in Goldenson [1984], p.197, but see also the previous quotations from Van Steenberghen [1970] and the Cartesian dialogue. A general survey of the psychological theories about the nature of curiosity is Voss and Keller [1983], see also Furth [1987] for a comparison of psychoanalytic and psychological approaches (although it does not mention the term *epistemophilia*). The fact that in psychology the phenomenon of curiosity is also studied by means of experiment about rats' behaviour indicates clearly enough the difference between this notion and that philosophical of *vis cognoscitiva*.

theoretical, to the effect that *curiosity* is more likely to appear in psychological studies while *epistemophilia* in psychoanalytic ones.

But once it is admitted that there is not a firm distinction between the two expressions, on the other hand it is certainly possible to understand the *desire to know* stated by the AP as a *very particular kind of curiosity*, and leave this latter word to cover a more trivial area of interest.[63] We may, in other words, follow Plato in drawing a distinction between *mere superficial curiosity* and *real epistemophilia*:

> Glaucon said: If curiosity makes a philosopher, you will find many a strange being will have a title to the name. All the lovers of sights have a delight in learning, and must therefore be included. Musical amateurs, too, are a folk strangely out of place among philosophers [...]. Now are we to maintain that all these and any who have similar tastes, as well as the professors of quite minor arts, are philosophers ? Certainly not, I replied; they are only imitation. He said: Who then are the true philosophers ? Those, I said, who are lovers of the vision of truth. (Plato, *Republic* V, 475d-e)

One way to interpret this passage is by using the two different German words for curiosity: *Neugier*, which is used to refer to superficial curiosity such as that for new things (note the two components of the word, "Neu" = "new", and "gier" which comes from "Begier" = "desire" but also, with a stronger sense, "passion"); and *Wissbegier*, which is used for the desire to know, and has a meaning very close to that of *epistemophilia* (note the two components "Wiss" of "wissen" = "to know" [e.g. *Wissenshaft* means science], and the second component "Begier" as for the other word), and therefore to Plato's "vision of truth". Following the German use, we can limit the meaning of "curiosity" to refer to that *superficial impulse*

---

63) A clear analysis of the nature and the differences between these two conceptions of curiosity is given by Hume [1967], Book II, Part III, section 10 ("Of curiosity, or the love of truth"). For a comment on this section cf. Laird [1967], pp.205-12. Also the philosophers of the Enlightenment had an interest in distinguishing among the different meanings "curiosity", cf. the long entrance "curiosite'" in the *Enciclopedie ou Dictionnaire Raisonne' des Sciences des Artes at des Metiers* [1751-1780], vol.4, p.577-578. Yet, also there the main distinction concerns superficial curiosity and *epistemophilia*: "[...] j'aime bien mieux me fixer a' la *curiofite'* digne de l'homme, & la plus digne de toutes, je veux dire *le defir qui l'anime a' etendre fes connoiffances* [my italics: "the desire that the soul has to understand his R-knowledge]; foit pour elever fon efprit aux grandes verites, foit pour fe rendre utile a fes concitoyens." (p.578, col.1). See also James' concept of scientific curiosity (our *vis cognoscitiva*) in [1981], vol.II, p.1046

to investigate, observe or gather information about *novel* or *interesting* material, and only in so far as this activity does not require a long, tiring, mental activity but rather a certain amusement. Accordingly, we may have curiosity for what the neighbours are doing, for the result of the football game, for the end of a crime story, but not for studying Hegel's revaluation of the ontological proof of the existence of God, nor for investigating the relation between Quantum Theory and the principle of bivalence. Curiosity as *Neugier* has more to do with the enjoyable, passive reception of information than with the active elaboration of new knowledge. Conversely, we can refer to this latter activity and to the interest that motivates it by means of that family of expressions summarized under the label epistemophilia as *Wissbegier*.

Obviously the Aristotelian Postulate does not concern the animal instinctive interest in knowledge or the concept of curiosity as *Neugier*, but the notion of *vis cognoscitiva* or *epistemophilia* as *Wissbegier*.[64] How are we to understand this latter ?

IV.6.c *VIS COGNOSCITIVA*

In D_{24} I've stated that the Aristotelian Postulate holds that all men have a *spontaneous* *conation* towards knowledge just for its own sake. The *vis cognoscitiva* or *Epistemophilia* as *Wissbegier* can therefore be defined thus:

> D_{25}) *Vis cognoscitiva* (or *Epistemophilia* as *Wissbegier*) $=$def. a spontaneous, inborn impulse to pursue knowledge for its own sake.

---

64) Curiosity as *Neugier* it is a too weak concept to give rise to the Perpetual Check of Reason: do we consider the hypothesis that "reality may be completely different from what we take it to be" a radical problem just because this contrast with a certain feeling of superficial curiosity - recognized as active in human beings - to know how things really are in themselves ? Certainly what is necessary here is the concept of *epistemophilia* as *Wissbegier*.

The characteristic of "spontaneity" was discussed when it was introduced in replacement of the "*phusei/naturaliter*" clause, but it deserves one final specification. "Spontaneous" in its Latin etymology comes from *spons* ("will") and in this case it refers to the characteristic of man to activate his own mental processes independently of any other external cause. In this way it is opposed to the concept of *inertia*, the tendency of a being to remain in its own state as long as this is not modified by some external cause. When the *vis cognoscitiva* is defined as spontaneous this means that it is its own cause, a sort of *unmoved motor*. This is made clear by the final clause "just for its own sake". The *vis cognoscitiva* drives man towards the acquisition of intellectual knowledge-why.

The characteristic of "inbornness" of the *vis cognoscitiva* still has some relation to the "*phusei/naturaliter*" clause, and its sense is obvious: the *vis cognoscitiva* is not acquired, but is a simple feature of that animal that is a human being. In so far as an animal is a knowledge-seeker, he posses a *vis cognoscitiva* or a sufficient degree of *epistemophilia* as *Wissbegier*; if a certain animal *desires to know* just for the sake of knowledge, then such an animal is a human being (see Boethius' paradox in V.4). This is the picture we receive from the classic tradition. The characteristic of being a knowledge-seeker is "natural" because it is inherited by all the human beings through the chain of reproduction.

Finally, the characteristic of being an "impulse" may assume three different senses, depending on whether we take "impulse" to refer to:
i) a force or influence exerted upon the mind by some external stimulus, suggestion, incitement or instigation;
ii) an incitement or a stimulus to action arising from some state of mind or feeling; or

iii) a sudden or involuntary inclination or tendency to act, without premeditation or reflection.[65]

In D_{24} "impulse" summarizes parts of the three main significances thus:

D_{26}) the epistemophilic impulse $=_{def.}$ an involuntary tendency, understandable in terms of state of mind, i.e. in terms of mentally internal tendency, which exerts an incitement upon the mind itself to pursue knowledge, without premeditation or reflection.

Other specifications about the significance of the Aristotelian Postulate may be felt necessary, and indeed some more comments on its theoretical implications will be made in the next chapter. But, for the moment, let me conclude this section by integrating the final definition of the AP with the latter specifications:

D_{27}) (a post-Cartesian version of) the Aristotelian Postulate (AP) holds that: "all men have a spontaneous, inborn epistemophilic impulse (conatus) that drives them towards the acquisition of objective knowledge-why of the intrinsic nature of external reality".

IV.7 THE GENESIS OF THE PROCESS OF KNOWING, THE PERPETUAL CHECK OF REASON AND ARISTOTELIAN-CARTESIAN MAN

The incitement exerted by the *vis cognoscitiva* upon the mind is the efficient cause that activates the process of knowing. Accordingly, the epistemic relation occurring between HKS and ER is due at least also to the presence of cognitive processes on the subject's side of the relation. It is the epistemophilic impulse that starts the process of knowing by addressing the cognitive processes towards the pure search for knowledge. Then, as far as intellectual knowledge is concerned, AP is supposed to present the ratio *essendi* of the process of knowing as an active principle. This theoretical status of AP in respect to P-knowing may turn out to be puzzling. For it seems that, in interpreting metaphorically the same Aristotelian-like theory of knowledge, sometimes we need to attribute to it

---

65) Cf. OED, second edition.

the conception of human knowledge as an active process, and some other times a conception of human knowledge as a passive process. This interpretative conflict is clear, for example, in the quotation given above from Van Steenberghen [1970]. Is the human mind a simple *tabula rasa* ready passively to receive the external input forced upon it by the action of external reality ? If human knowledge merely consists in a passive organization of information coming from the external world, how is it that Aristotle also speaks of a force driving man towards the acquisition of knowledge? In the end, who or what is playing with the white in our chess-game analogy ?

Of course the key point of the issue lies in the distinction between *active and passive roles* in the process of knowing. And the answer to our perplexity consists in realizing the large inadequacy of such a distinction, at least before the Cartesian revolution. Still in Scholastic philosophy (as it is possible to see above in the quotations from Thomas Aquinas) there is no drastic separation between subject and object, which is the essential background of the antithesis "active/passive role in knowing". Knowledge is a matter of co-operation[66] between man and reality, and in the same way as the *vis cognoscitiva* is "naturaliter" so is the impression that external reality lives on our senses (cf. again the passage I've quoted from Van Steenberghen [1970], and the first passage from Thomas Aquinas about the conjunction of knower and known in knowledge). If a distinction should be drawn, this could be done by limiting the "passivity" to the cognitive processes at the level of perception (one of the *conditiones sine quas non* of the P-knowing) and the "activity" to the desire to know at the level of the efficient causation of the process of knowing. Yet, it must be born in mind that, at least until Ockam,

---

66) This is the expression used by Scholastic authors. Cf. for example De Wulf [1956], who says (accepting the teaching of Keutgen [1868], pp.30 and ff.): "This representation [of the thing known in the knowing subject] is effected by the *co-operation* of the known with the knower. And this *co-operation* guarantees the real objectivity of our knowledge." (p.128, my italics).

perception does not yet amount to full knowledge, and therefore that human knowledge is to be seen as "motivated" by the desire to know, as a sort of potentiality to know, which only needs an actual stimulus to render actual in itself, as real knowledge, the external input.[67] By means of an image, it is possible to say that nature gives the material for the building while man is both the architect and the builder: as a builder he receives the material, and as an architect he gives the orders whereby this material can become a real house. None of the two partners, man and nature, is passive or active in respect to the other, in the same way as we don't apply this dichotomy to two people who are shaking hands.

Once we free our interpretation from the misleading use of the passive/active dichotomy, we are then able to disclose the real *analogical reasoning* that underlies the acceptance of the Aristotelian Postulate: that in terms of *dynamic movement*. If we want to understand the nature of the *vis cognoscitiva* we need to come back to that dynamic sense implicit in the formulation of the AP since AGS, that sense to which I have referred throughout this chapter. The issue is of vital importance: for a proper understanding of the Aristotelian Postulate and the nature of the *vis cognoscitiva* we need to replace the common dichotomy *active vs. passive* by the more adequate analogical distinction *dynamic vs. inertial*.[68] It is only according to this latter that man is said to have an inborn *tendency to go*, epistemically speaking, towards that part of reality which *doesn't change*, but that is *immobile* in its perfection. In this *voyage towards* the final knowledge (and here there may be also a strong eschatological sense) he is

---

67) Although I believe this interpretation not very controversial it turns out from it that at least there is a strong connection (if not a real identity) between the concept of *vis cognoscitiva* and that, very problematic, of *active mind*. This latter, as perhaps distinguishable from a *passive mind*, introduces the famous debate about the presence of two minds, one active and the other passive, and their mutual relations, together with their ontological status. I will come back on this point in the next chapter, but I must premise that the issue cannot be pursued much further in this place. I believe some indications in this direction are given by Lear [1988], chapter 4, especially sections 3,4,5.

68) There is a terminological problem in the formulation of this second dichotomy, namely that after Newton the law of inertia governs both states of rest and of dynamic movements. In this context I shall use 'dynamic vs. inertial' in a non-technical way, as it were, pre-Newtonian. I shall be more specific in chapter VI.

helped by nature, which is such as to allow man to reach his target. Reality itself provides the *highway* to its own intrinsic nature: man needs only to *journey* from his state of ignorance to that of full understanding. Consistent with this image, very often Neoplatonist and medieval philosophers will identify the last stage of the epistemic journey with some kind of intellectual community with God and his omniscience, in a sort of final illumination.

All the various formulations of the AP we have been discussing up to here share this interpretation of the principle of the genesis of the process of knowing as an *epistemophilic motor* that drives man towards knowledge. Knowing as a way of *grasping what doesn't change* (in our case the intrinsic nature of ER) is more than a metaphor, it really expresses the underlying dynamic image that chiefly sustains the Aristotelian vision of man. Like the stone that falls to the ground (its natural place), so man would follow his path to his natural place, his pure contemplative life in the kingdom of perfect, immutable knowledge. The stone is not active nor passive in respect to his fall, it simply follows a natural tendency. Likewise, man has a conation towards the kingdom of *episteme*, and tries to reach it by a *movement* that *goes* from the awareness of his ignorance to the acquisition of epistemic knowledge of what is immutable.

The whole picture fits in with what has been said above about the characteristic of the epistemophilic impulse of being *without premeditation or reflection*. Since the desire to know is the principle of the genesis of the process of knowing it must be necessarily a- or pre-epistemic. It is not because [we know that we desire to know] that [we pursue knowledge], but that [we pursue knowledge] because [we desire to know]. We don't know that we desire to know (we are not aware of this driving force) until we have reached the end of the process - when the highest level of abstract and "for-knowledge-sake-only" knowledge has been reached - i.e. when, within the philosophical discussion, we realize that what was driving us

towards knowledge was this spontaneous, inborn epistemophilic impulse to pursue knowledge. In other words, the *vis cognoscitiva* practically manifests itself in the activation of the process of knowing, but emerges theoretically in its self-evidence, in a clear formulation, only at the end of the process, in philosophical discussions.

It is also at the level of philosophical analysis that we understand the AP as being the third component of the Traumatic Doubt. In fact what is supposed to be the *ratio essendi* of P-knowing turns out to be also the third *conditio sine qua non* necessary for the formulation of the TD "reality in itself may be completely different from what we take it to be". The traumatic taste that such a possibility seems to posses requires an Aristotelian-Cartesian sensibility to be appreciated. It is only the Aristotelian-Cartesian man who can come to formulate the Perpetual Check of Reason and at the same time remain scandalized by his own hypothesis. But, who is this Aristotelian-Cartesian man ?

Many characters may be suggested, for he is a composition of different typologies. He is *Prometeus*, whose love for knowledge and for rendering it public drives him to challenge the gods themselves; he is *Ulysses*, "this gray spirit yearning in desire/To follow knowledge like a sinking star,/Beyond the utmost bound of human thought",[69] a figure where the idea of an endless voyage towards new knowledge receives its full representation; but probably he is more than anything else *Faust*. Goethe has made of him the typical figure of the knowledge-seeker *par excellence*, and with some slight modifications we can suppose him to play in this context the part of the Aristotelian-Cartesian man. Faust spends his whole life in pursuing knowledge, he desires to know what the world is in itself, the last answers to the last questions,[70] like in the case of the Cartesian

---

69) Lord Alfred Tennyson, *Ulysses*, 30.
70) It is interesting to note that, predictably enough, Freud uses Faust's typology to refer to the desire to know, in connection with the determination of the epistemophilic-scopophilic impulses, and the possibility of sublimation of the desire to know. Cf. Freud on Leonardo vol. 11, pp.74-7, 80-81 and 92; for the hypothesis of sublimation cf. vol. 11, pp.77-80: "Because

negative demon, and with some affinities with the case of the Platonic positive "daimon", he is tempted and driven by Mephistopheles who promises him what will turn out to be a false image of life. In the end he will find the solutions both in a *voyage* to Greece, that we can read in terms of a reintroduction of the "phusei" clause, and in God, the veridical third element which ensures that *ordo rerum* and *ordo idearum* harmonize. It has been said that

> at the end of the great will to knowledge there is of necessity always "theoretical despair". The thinker's heart burns when he realizes that we cannot know what we "really" want to know. Faust is basically a desperate Kantian who tries to escape the compulsion to self-limitation through a magical backdoor. The urge to go beyond the limit remains stronger than the insight into the limitedness of our knowledge. (Sloterdijk [1988], pp.178-9).

It is the value of this Faustian image of man[71] that will be challenged in the next two chapters.

---

of his insatiable and infatigable thirst for knowledge Leonardo has been called the Italian Faust' (vol.11, p.75).
71) Needles to say, there is a immense literature on such a phenomenon of 'Faustism', see Atkins [1973].

CHAPTER V

THE DEFENCE OF THE ARISTOTELIAN POSTULATE

He that increaseth knowledge,
increaseth sorrow"
Ecclesiastes, I, 18

V.1 INTRODUCTION

In this chapter we shall examine the theoretical *bedrock* underlying the traditional attitude of acceptance towards the AP. In the course of the chapter I shall distinguish between three different kinds of "grounds" on which the acceptance of the AP may be *somehow* based.

The first kind consists in some general philosophical perspectives whose assumption may have prevented from considering the traditional acceptance of the AP as *problematic*. These perspectives are the "AP-favourable environments" in which the AP may flourish. They are the reason why, traditionally, the assumption of the AP has never been considered controversial. Philosophers working within these frameworks may have not come to doubt the value of the AP for the simple reason that the AP was, or could be easily made, consistent with their general philosophical perspectives.

The second kind of "ground" there may be for the acceptance of the AP consist of a possible *abductive* argument that could be put forward for a *positive defence* of the value of the AP.

The last kind of "ground" on which the assumption of the AP *seems* to lie is *analogical*. While the abductive has been explicitly endorsed by several philosophers, Aristotle and Thomas Aquinas among them, the analogical reasoning, which I suspect is also at work in the acceptance of the AP, has never been fully stated. The *analogical ground* are then,

implicit, and therefore I shall make their existence a matter of historical conjecture.

Roughly speaking, the AP holds that all men are philosophers. Our ordinary evidence tells us that *in fact* the great majority of men most of the time really don't care about knowledge for its own sake, at least not so often, so extensively, or so earnestly as the AP would have us believe.[1] The fundamental thesis that I will support throughout this chapter is that our ordinary evidence definitely undermines the value of the AP. In order to argue against the assumption of the AP I shall follow the methodological principle whereby if no cogent argument can be put forward in favour of the AP, our ordinary evidence forces us to adopt a more economic attitude towards the explanation of man's never ending search for knowledge.

To summarize the contents of the chapter briefly, in section 2 I shall comment on the logical nature of the analysis conducted in this chapter, explaining why a historically detailed reconstruction and criticism of the ground on which AP has come to be accepted would be an impossible enterprise. With an eye to the methodological principle of economy, in section 3 I will introduce and comment on a plan of the theoretical "environments" within which the assumption of the AP may camouflage itself as uncontroversial. I shall stress the fact that the "AP-favourable environments" don't go any way towards the *epistemological justification* of the AP. It is not the case that they *positively* support the assumption of the AP; they simply *allow* or encourage the *uncritical assumption* of the AP to slip into our picture of man. As I see them, their historical task has been that of defending the AP *indirectly*, by embedding it in philosophical contexts where its

---

1) At this proposal it is sufficient to recall what effect had Socrates' investigation on how much his fellow citizens in Athens desired to know, cf. Plato's *Apology*, 21bd, 22d 23b. Peirce's question "How many people there are who are incapable of putting to their own consciences this question -'Do I want to know how the fact stands or not ?' ?" (2.635) should be answered "too many !".

problematicity could more easily pass unnoticed. For this reason, despite the enormous historical importance of the topic I won't devote too much space to their critical analysis.

Things are quite different with the abductive argument, for in this case we are dealing with a position that requires a proper counter argument. My intention is to show that (i) the AP is untenable and that (ii) even if the AP were acceptable, the abductive argument is not strong enough to support it. The two points will be the topics of two different sections. Since (i) ammounts to an argument against the plausibility of the AP in general, I shall employ it to bridge the sketch of the background conditions for the acceptance of the AP with the proper confutation of the abductive argument. So in section 4 I will focus on the paradoxical conclusion to which the adoption of the AP, whether defended or assumed, would give rise, namely that most men and women are not to be considered "Human Beings" because they lack the essential property of being *"Epistemophilic Beings"*. In section 5 I will argue that, quite apart from whether or not such an astonishing conclusion is acceptable, the *abductive* argument is not powerful enough to defend the AP.

In in section 6 I will be concerned with the *analogical reasoning* that it seems underlies the assumption of the AP: a comparison between knowing and moving, and an understanding of the relation between *vis cognoscitiva* and activity of knowing as if it were that between mover and motion. Being analogical, this basis on which the AP could be accepted requires critical comment rather than confutation. Two hyotheses about some further implications of the whole hypothesis on the analogical grounds in favour of the acceptance of the AP are introduced in section 7. Since I believe that for some of its aspects the analogical reasoning represents a fruitful way of discussing the genesis

of the process of knowing, I will turn to its modification in the next chapter.

Finally, in section 8 I sum up the conclusions of the chapter. Because of the absence of any cogent argument in favour of the AP and because of the presence of an overwhelming evidence from our daily life about man's lack of interest for knowledge, the AP should be replaced by a better principle. We shall be left with the question of what could actually replace it. The search for an answer to this question will be the concern of the next, and final, chapter.

V.2 LOGICAL VS. HISTORICAL CRITICISMS OF THE AP

The chapter concerns only an *abstract reconstruction* of the various *theoretical grounds* on which the acceptance of the AP may lie and therefore only a *logical rejection* of the AP. The *logical* and *abstract* nature of the approach is due to the fact that, unfortunately, a full scholarly criticism of the AP, such as radically to uproot it from its *historical roots*, would be an impossible enterprise. Given what has been said in the previous chapters, it should be obvious that the whole initiative of surveying and opposing all the possible grounds on which the Aristotelian Postulate may have been assumed would amount to nothing less than a critical analysis^2 of a large part of the western tradition in the philosophy of knowledge. If the *history of epistemology* can be read as a list of attempts to solve the Traumatic Doubt, we have also seen how most of the solutions of the Perpetual Check of Reason presuppose the truth of the AP. An obvious consequence of this state of affairs is that a historically detailed discussion of the AP should also take into account all the specific reasons that each of those hypotheses

2) In this case the terms 'deconstruction' and 'archeology of knowledge' would probably help in describing what I mean, if it were not for the radical conceptual implications they carry with them.

may have had to assume the AP. Furthermore, as if the difficulties implied in such a "restricted" perspective were not already formidable (and alarming, for what pertains to the academic limits of the present investigation), matters would be even more complex once our investigation widened to include the role of the AP in the *history of our culture*. To the intimidating difficulties implied in a critique of the AP in respect to the *history of epistemology*, we should add all the problems deriving from a close study of the connections occurring between the AP and the anthropological self-description of man in the *history of western culture*. It is obvious that a refusal of the AP on the grounds of a historical investigation is simply an unrealizable project. A significant example will shortly illustrate the point more specifically.

The remarkable example concerns the shift that the concept of *vis cognoscitiva* underwent in the seventeenth-century from being understood as "an epistemic desire to collaborate with nature" to coming to mean "an aggressive, dominating will of mastering nature". The critical moment in this shift can be historically identified, quite accurately, in Bacon.[3] In his work[4] man as a knowing subject, once again characterised as the philosopher, is conceived as facing the adventures of the intellect in the same way as Bacon's coeval sailors were facing the dangers of the seas, and seemingly for the same reasons, vz. the search for some kind of power. If it is true that Bacon still recommends that one *listen to what reality says*, it is also true that such a listening is for the purpose of a better *mastery of nature*. The vis

---

3) For Bacon's concept of man cf. Wallace [1967] especially chapter 7. Unfortunately the book leaves quite untouched the issue of the 'desire to know' and its connection with the concept of 'knowledge as power'.
4) Bacon's position is condensed in his *Discourse in Praise of Knowledge* (vol.I, pp.123-126), in Bacon's *Letters and Life* [1858-74].

cognoscitiva shall have no restraints, and its maxim is *"plus ultra"*.[5]

As Steadman has summarized:

> For Bacon and his seventeenth-century successors [...] Science
> has already begun to conquer (he suggests), and may continue to
> conquer, new reality beyond the Pillars of Hercules, farther
> than the greatest mythical heroes had penetrated. Since
> *knowledge is power, the natural philosopher, the student of
> nature, may subject greater natural forces to his command* than
> the strongest of classical worthies, accomplish nobler acts of
> benefit for the public good than the ancient benefactors [...]
> (p.8). As the century advanced [...] it becomes increasingly
> aware of the practical as well as the theoretical benefits
> promised by the "new science". With Bacon's insistence that
> *"knowledge is power"* and Descartes' assertion that it could
> "render ourselves the lords and possessors of nature"* the
> philosopher acquired (it would appear) a more valid title to
> heroic eminence than the warrior. [...] The dominion he promised
> was, moreover, both intellectual and physical; *his empire of the
> mind conferred positive control over nature.*
> *) [Steadman's note] Basil Willey, *The Seventh-Century
> Background*, (New York, 1953), p.96.
> (Steadman [1971], p.45 [my italics])

After the scientific revolution of the seventeenth century the

conception of a human, inborn *vis cognoscitiva* is transformed, for it no

longer appears as a *vis epistemophilica* (or more simply *philo-sophica*)

but rather as a *vis heroica*, or *technocratica*. Certainly a debate about

the former could not avoid an extensive study of this latter and then

references to the works of Nietzsche and Heidegger.

The enormous importance of the cultural and historical roots of

the AP emerges so conspicuously from this indicative example – but many

others could easily come to the reader's mind[6] – that, in correlation,

the unsurpassable difficulties inherent in a global, historical debate

of the topic should appear manifest. In fact, along the lines of these

brief historical considerations, the Aristotelian Postulate turns out to

be at one with that *dignitas hominis* ("dignity of man") so much exalted

---

5) The maxim comes from 'non plus ultra' ('not further') which signed the limits of the
known world, during the Classic period, on the est side (the Pillars of Hercules). Cf.
Steadman [1971], p.4-5.
6) Another very important example I can think of is the debate (which very often became a
real war) between Gnosis and Christianity on the role of knowledge (and therefore of the
desire to know) in the redemption of man. Cf. Rudolph [1983], pp.88-204, especially pp.
113-118.

during the Renaissance[7] and so influential all throughout the western philosophical tradition. The Aristotelian Postulate is so tightly interwoven with our cultural history that to individuate its historical roots and challenge its validity by means of a scholarly investigation would amount to giving a very serious, if not fatal, blow to the image that man has always had of himself. Accomplishing such a "revolutionary" mission of reconstructing, challenging and eventually modifying one of the basic assumptions of philosophy of knowledge since Aristotle by means of historical and scholarly investigations is impossible. At any rate, producing a similar shift in our epistemological paradigm (to continue with a Kuhnean language) is by no means an acceptable task for a chapter of a thesis. This is why I will rather configurate the "grounds" underlying the acceptance of the AP in the same way as I have formulated the AP in D_{27}, as *logical constructs*, whose real occurrences should be eventually examined in their own characteristics, case by case. I will formulate the different factors that may have contributed to leave the AP unchallenged for so long as *conjectural syntheses* of richer and more articulated historical positions. And consequently, I will criticize the assumption of the AP on a parallel logical basis. If someone should be interested in giving a full account of the history of the AP and the various "forces" that may have worked in favour of its acceptance, he would have to locate the *logical reconstructions* provided in this chapter in particular authors, adapt them in respect to specific theories of knowledge and anthropologies, and connect them more closely to the real versions of the AP that different philosophers may have advocated.[8] The aim of this chapter is only that of making *logically*

---

7) The theme of the *dignitas hominis* in its more technical use belongs to the philosophy of Renaissance, but generally speaking it summarizes the high self-conception that western culture has formulated of the nature of man. For a very good introduction cf. Trinkaus [1973], who, however, concerning only the Renaissance's concept of *dignitas hominis* does not focus too closely on the AP. More relevant to the analysis of the AP may result Kristeller [1972], first essay, and Gentile [1968].

8) It seems obvious that the relation between certain reasons for believing in the truth of the AP and the real contents of a certain formulation of the AP are mutually

persuasive the necessity of a shift in our epistemological paradigm from an Aristotelian to an anti-Aristotelian Postulate.

V.3 A MAP OF THE PHILOSOPHICAL CONTEXTS FAVOURABLE TO THE ACCEPTANCE OF THE AP

There are various philosophical "environments" in which the acceptance of the AP could be consistently framed and then flourish. Although for reasons extraneous to proper epistemological support of the AP, favourable contexts may have contributed to its traditional acceptance as a justified principle. Some of them may have been *sufficiently compelling* as to let the controversial nature of the Aristotelian Postulate pass unnoticed. Some others may have been *sufficiently inert* as to make a philosopher endorse the AP uncritically. None of them can be shaped into a *proper argument* in favour of the AP, and any attempt to give a logical assesment of their justificatory value would be pointless. Such philosophical contexts can be presented as interesting *environments* within which the AP may have been allowed to prosper, but they could be felt more or less *persuasive* only if we were to disregard the obvious evidence from our everyday observations. Once we stick to our ordinary evidence the "justificatory character" they seem to bring to the assumption of the AP disappears. What we are left with, at the end of the survey, is only a deeper understanding of the evolution of the acquescient acceptance of the AP through the history of philosophy.

The four families of contexts that may have favoured the uncritical assumption of the AP are that teleological ($C_{tel.}$),

---

interdependent. Certain reasons for believing that what the AP says is true will give rise to a certain version of the AP, and conversely, a certain version of the AP will require the acceptance of certain reasons as good reasons to believe that what that version of the AP says is true.

concerning the aims of Nature (*lay teleology*) or God's plans (*religious teleology*); that *theological* ($C_{theol.}$) concerning the relation between God and man; that *pragmatic* ($C_{prag.}$) concerning man's moral behaviour, intellectual happiness or contemplative life (*eudaimonia*); and that *psychological* ($C_{psyc.}$) concerning human rational nature, or man's awarness of himself.

This organiztion of the "philosophical territories" where the AP has the best chances to take root follows the academic organization of philosophical topics and it is merely rational. To some it may look, in different degrees, arbitrary. Personally, I find it heuristically helpful, but what really matters here is that any other possible map would be acceptable provided it would cover in effect the whole extension of typologies of the most important contexts where the assumption of the AP could appear uncontroversial. In what follows I shall examine each of the families of "AP-favourable environments" in order to articulate some of their principal contents. Still in terms of a map-analogy, let me add that I shall disregard any articulated picture of networks of "AP-favourable environment". At the end of this section I shall make some general comments on certain fatures common to the whole map. As I've pointed out above, the "acquiescent endorsment" of the AP arising in the various "philosophical territories" faces the inevitable difficulty represented by our ordinary evidence. I shall discuss this crucial aspect in the next section, under the label of "Boethius' Paradox".

$C_{tel.}$) The *teleological contexts* within which the acceptance of the AP may more easily occur unquestioned can be traced to the Aristotelian use of the *phusei*-clause. They can be distinguished in *lay* and *religious* contexts, depending on whether they presuppose Nature or God as the

ordering principle of reality. In both cases, a philosopher who believes that

(i) the universe is ordered in such and such a way; that

(ii) the universe follows a certain direction in its development; and therefore that

(iii) each part of the universe, let's say of a certain importance, has its own role within the universe itself;

in facing the question why there is a phenomenon like the human never-ending search for knowledge, may be led to favour, uncritically, the traditional answer provided by the AP because the search for knowledge for its own sake is one, if not the principal, specific *vocation of man* within such an ordered universe. Such a "vocation" can be in turn differently characterized according to further metaphysical assumptions such as the necessary fulfilment of a sort of *rational/aesthetic order* in the universe or, more idealistically, the metaphysical process of *self-understanding led by the Absolute* - which would "use" man's cognitive activity in order to raise Nature to the level of awarness of the Self - or again man's role as a cognitive *master of reality*, (see below Bacon's position and the conjunction of the vis *cognoscitiva* with a will to power).

C$_{thel}$.) The *theological contexts* that may encourage the acceptance of the AP are more various. First of all, a philosopher who believes that

i) there is a creator God; that

ii) such a God is *omniscient*; and that

iii) man has been made in God's image;

in facing the question why there is a phenomenon like the human never-ending search for knowledge, may be led to favour, uncritically, the traditional answer provided by the AP because man is made in God's image and, although not omniscent has at least an inborn *vis cognoscitiva*, a

spontaneous tendency which drives him to search for a state of full knowledge similar to that of God.

Secondly, and in relation to this first approach, a philosopher who believes that

i) there is a creator God; that

ii) at the beginning of the creation man was with God in the heaven and he knew God; and then that

iii) there was the original fall;

in facing the question why there is a phenomenon like the human never-ending search for knowledge, may be led to favour, uncritically, the traditional answer provided by the AP because the *vis cognoscitiva* is in part what has remained of the original state, as a striving for perfect knowledge just for the sake of knowledge, man is not made for this earthly life but tends cognitively towards the heavens. This cognitive tension would show itself in man's search for knowledge just for the sake of knowledge.

Thirdly, a philosopher who believes that

i) man is in a condition of sin because he has fallen; that

ii) knowledge, in a broad sense of the term, is the only way man can recover his previous happy status; and that

iii) by means of a cognitive ascension towards God man will reach a perfect intellectual conjunction with God;

in facing the question why there is a phenomenon like the human never-ending search for knowledge, may be led to favour uncritically the traditional answer provided by the AP because man is a knowledge-seeker who strives for knowledge for its own sake because the more he knows the closer he gets to God. If only the sapient has a place close to God, then knowing becomes an eschatologic process of salvation, and the assumption of the presence of a *vis cognoscitiva* in man would be rather consistent with the whole theological picture.

C_{prag}.) The *pragmatical contexts* through which the acceptance of the AP may have slipped into our picture of man without being radically challenged are of two kinds.

According to the first kind, a philosopher who believes that

i) man has a spontaneous tendency to act morally; that

ii) man errs only because he misjudges what is really good for him; and therefore that

iii) any human action morally deprecable is due to some sort of ignorance about what is the best thing for man, that is if man could always know correctly what is good he would always act according to that good and never make a moral mistake (*Socratic intellectualism*);

in facing the question why there is a phenomenon like the human never-ending search for knowledge, may be led to favour, uncritically, the traditional answer provided by the AP because man has an inborn desire for knowing the states of affairs in which he finds himself, and that the continuous fulfillment of this desire can allow him to avoid states of ignorance and therefore moral errors. The defence of a Socratic intellectualism in ethics can be helped by an uncritical assumption of an Aristotelian intellectualism in the analysis of the genesis of the process of knowing.

According to the second kind of pragmatic context, a philosopher who believes that

i) man desires happiness; that

ii) man reaches the maximum degree of happiness in a contemplative life; and that

iii) the contemplative life is a result of a cognitive activity;

in facing the question why there is a phenomenon like the human never-ending search for knowledge, may be led to favour, uncritically, the traditional answer provided by the AP because the activity of knowing is something good in itself and that in man the search of knowledge for its

own sake is at one with the desire for happiness. Actually, the search itself may come to be seen as human happiness, no matter whether or not it culminates in a final acquisition of knowledge-why.

C_{psyc}.) Finally, we have the *psychological contexts* where the AP may receive an uncritical welcome. A philosopher who believes that

i) the highest form of life for man is conscious life, as this is expressed by the Delphic Oracle's maxim "know thyself"; that

ii) man wants to achieve this status of full consciousness; and that

iii) this status can be better reached if man is engaged in a purely theoretical activity of knowing;

in facing the question why there is a phenomenon like the human never-ending search for knowledge, may be led to favour, uncritically, the traditional answer provided by the AP because a pure desire for intellectual knowledge may contribute in developing man's awarness of himself.[9]

The historical importance of these foregoing philosophical perspectives can hardly overstated. Consider for example the strict relation that has always occurred between the idea of a *Faustian man interested in knowing the intrinsic nature of external reality just for the sake of knowledge* and the conception of *man as a rational animal.* Although the exaltation of Reason certainly belongs more properly to the philosophy and rhetoric of the Enlightenment, *rationality* and *epistemophilia* have been always united in a single vision of the nature of man, at least since Greek philosophy. The acceptance of the Aristotelian Postulate goes together with the Aristotelian definition of man as a rational animal. To a greater or lesser extent, philosophers have for centuries discussed the relation between *happiness* and

---

9) Cf. Alexander of Aprhodisias' *On Aristotle Metaphysics*, I, 1, 5.

contemplative life; between these two and human knowledge of God; between salvation, faith and knowledge; between Adam's eating the forbidden fruit of the tree of knowledge, as it is reported in Genesis, and the original sin of pride; between eschatological perspectives and neoplatonistic or gnostic visions of man as cognitively ascending towards the One. And even nowadays we discuss whether ethical propositions need a particular kind of knowledge, and if morality is grounded on knowledge. In all these vital philosophical issues the AP has occurred as uncritically accepted, playing very often an influential role, as a key assumption that only very rarely[10] has come to be discussed as controversial.

Within the contexts above outlined the AP would more hardly appear worthy of a full criticism. Rather, on the grounds of other philosophical considerations extraneous to the epistemology of the genesis of P-knowing, $(C_{tel.})/(C_{psyc.})$ may have directed the philosophical investigation towards an acquiescent acceptance of the AP. It is only by representing to ourselves this extensive typology of philosophical environments, together with their theoretical prestige, that we can assess how it has been possible that almost everything in philosophy has been challenged but the alleged epistemophilia of man.

Some features of $(C_{tel.})/(C_{psyc.})$ deserve at least a brief comment. The clauses listed by (i)-(iii) in $(C_{tel.})/(C_{psyc.})$ are those which actually summarize the philosophical environments whithin which the acceptance of the AP may have been uncritically encouraged. Such "AP-favourable philosophical environments" represent the philosophical highway through which the traditional acceptance of the AP has come to us, stenghtening itself along the way. Two remarkable features evidently

---

10) Two interesting exceptions are ancient Pyrronhism (cf. Burnyeat [1980]) and the Neoplatonic Negative Theology started with Dionisus the Areopagita, cf. next chapter. For some information about the Platonic-Paolin negative characterization of the desire to know see the history of the motto "Noli alta sapere" ("don't desire to know the high things") and its connection with the motto "Sapere aude" in Ginzburg [1986], pp.107-132.

unite all the "AP-favourable philosophical environments": they all tend to praise the pure search for knowledge as if it were something *ethically commendable*; and they all fundamentally rely on *metaphysical assumptions*. Such different features are rich in consequences relevant to the present investigation, and we need to dwell on them if we want understand the basis on which the AP has come to be traditionally accepted. This is the task of the following to sub-sections.

V.3.a THE ETHICAL UNDERSTANDING OF THE AP

The ethical understanding of the *vis cognoscitiva* is embedded in the positive evaluation of the AP. A philosopher who works within $(C_{tel.})/(C_{psyc.})$ is likely to be led to assume three additional views concerning human never-ending search for knowledge, namely that:

i) each person has in prospect a (relative to her life) *never-ending cognitive investigation* of the universe; hence that

ii) each person virtually tends to (contribute to) the elaboration of the *final library of the universe*; and finally that,

iii) each person contributes to the elaboration of the universal library, if not *in agreement*, at least *not in contrast with reality* (this is an attenuation of the Aristotelian *phusei* clause).

These supplementary characterizations of what is implied in the conception of the *vis cognoscitiva* introduce another fundamental aspect of the acceptance of the AP. From a close look to the "AP-favourable environments" we can understand that the acceptance of the AP is grounded, in a very significant respect, on the idea that *knowing* is a *praiseworthy pleasure in itself*, and that it is an activity that leads to the acquisition of the *higher state of being a learned person*. Implicit in the assumption of the AP is the view that a man who is busy in the activity of *knowing enjoys himself in the course of such a*

process and is a *better man* than one who doesn't know or who is not involved in some learned activity. Hence, it is very likely that the same philosopher who is led to accept (i)/(iii) will also assume that:

iv) the *vis cognoscitiva* is something good in itself.

Note that this ethical aspect of the desire for knowledge is already implicit in the metaphysical translation undergone by the clause "for its own sake" in each context. Historically, from $(C_{tel.})$ to $(C_{psyc.})$ there seems to be a crucial identification of "the search for knwoledge just for the sake of knowledge" with "the search of knowledge for the sake of some kind of metaphysical ends", and then with "the search of knwoledge not for the sake of some empirical or utilitarian reasons".

An important consequence of uncovering the "ethical" aspect of the notion of *vis cognoscitiva* is that, correspondingly, the boundary between understanding the AP as a *description* of the essential nature of man and understanding the AP as a *prescription* to men of a certain way of living, becomes much less firm. We may now wonder whether, when a philosopher assumes the AP, he is actually *recognizing man as essentially a knowledge-seeker*, or he is saying that *man ought to be a knowledge-seeker.*[11] When the AP itself defines man as a knowledge-seeker is it *describing* a vital aspect of human nature or *prescribing* how man should behave ? Consider the famous speech that Dante put in Ulysses' mouth: "Consider who you are:/You were not born to live like brutes/but to seek virtue and knowledge".[12] It is difficult to decide whether we should understand Ulysses' words merely as a sort of *invitation* to follow a certain way of life or as a *description* of the more intrinsic nature of man.

---

11) Such a distinction is very clear in Locke, see next chapter VI.5.b.
12) "Considerate la vostra semenza:/Fatti non foste per viver come bruti/ma per seguir virtute e conoscenza." Dante A., *La Divina Commedia*, *Inferno*, XXVI "Ulisse", 118-120. Commentators commonly interpret the speech has having been directly suggested to Dante by Thomas Aquinas' Commentary on Aristotle's *Metaphysics*.

The difference between these two interpretations becomes a real contrast once we refer back to our ordinary evidence as the touchstone for assessing the epistemological value of the AP. Given that the majority of men are not knowledge-seekers in the sense stated by the AP, then the AP cannot be taken as a description of man, at leat not at its face value. Then either the AP must be interpreted as an ethical statement, or it needs to appeal to some further and "deeper" notion of man. If the AP turns out to be a mere precept, praising a certain kind of life, its epistemological importance becomes very marginal. If its value depends on some particular, metaphysical doctrines, then its problematicity becomes more and more evident. In both cases, it definitely requires an articulated justification. The ethical nature of the AP is something we don't need to be concerned with in this context since I will briefly discuss it in the next chapter. In the next sub-section I shall consider the metaphysical grounds for the acceptance of the AP.

V.3.b THE METAPHYSICAL GROUNDS FAVOURABLE TO THE ACCEPTANCE OF THE AP

The second characteristic that associates all the "AP-favourable philosophical environments" is that. $(C_{tel.})/(C_{psyc.})$ consist of *metaphysical views* about certain states of the universe. This is not surprising. In the previous chapter I've been delineating the Aristotelian Postulate as a powerful hypothesis about the essential nature of man, the genesis of the P-knowing and the interpretation of the Perpetual Check of Reason. Although I've said that it represents the anthropological component of the Traumatic Doubt, we may understand the AP as a *metaphysical statement*. By asserting the presence of a spontaneous, inborn, epistemophilic impulse (*conatus*) in the human mind, the AP appeals directly to a *certain description of a state of affairs*

in the universe. Once we have individuated the AP as a *metaphysical hypothesis* concerning the nature of man, we may expect to find it embedded in similar *metaphysical grounds*, such as the (i)/(iii) clauses of $(C_{tel.})/(C_{psyc.})$. The fact that the traditional acceptance of the AP occurs in metaphysical descriptions of the universe is perfectly consistent with the fact that the AP is supposed to be an answer to the question about the genesis of the process of knowing, and therefore to represent a logical[13] appeal to a hypothetical *pre-epistemic* state of a human mind. Stating a pre-condition of the existence of epistemic states, the uncritical acceptance of the AP is more likely to slip into metaphysical contexts concerned with the description of certain aspects of the universe.

From the primarily metaphysical nature of the philosophical environments within which the uncritical acceptance of the AP may occur, we can infer that most of the time the acceptance of the AP may be motivated simply by its coherent agreement with some global, metaphysical picture of the status of the universe. Most of the time the AP may turn out to be accepted on grounds that are not really arguable, but much more matters of speculation or faith. This leads to the conclusion that the *metaphysical environments"* favourable to the *assumption of the AP* cannot be turned into *epistemological arguments for the justification of the AP*. It is one thing to explain why the AP has been traditionally accepted as uncontroversial, quite another to provide it with an epistemological support. If they were taken as supporting arguments in favour of the AP, the philosophical contexts mapped above could be liquidated simply by means of the crude observation that they would be trying to support the *dubium per* (what is at least as much, if nor more) *dubius*. The persuasive force of $(C_{tel.})/(C_{psyc.})$ in favour of

---

13) Here 'logical' means 'not psychological or concerning the real state of affairs according to which human knowledge develops'; it is rather to be understood as 'conceivable without contradiction'.

the acceptance of the AP would lie totally on their metaphysical assumptions stated in the (i)/(iii) clauses. But these latter call into play whole metaphysical Weltanschauungen that are even more questionable than the AP. The assumption of $(C_{tel.})/(C_{psyc.})$ can encourage the assumption of the AP, but that the capacity of $(C_{tel.})/(C_{psyc.})$ to support the AP epistemologically is null. By saying this, I'm supposing that we are not ready to make any concession to the supporter of the AP in terms of radical metaphysical doctrines which could turn out to be of vital importance for the justification of the AP. The supporter of the AP must limit himself to either empirical or logical argument, without evading the issue by recourse to trascendent conditions.

To someone this requirement and the following dismissal of $(C_{tel.})/(C_{psyc.})$ as means to justify the acceptance of the AP, may not be entirely clear. On the contrary, someone may consider it hasty, and a little unfair towards the importance of $(C_{tel.})/(C_{psyc.})$. The objection may run like this. First of all, $(C_{tel.})/(C_{psyc.})$ show that behind the AP there is a whole metaphysical field of interpretations of the nature of the universe and of man's role within it. We should not underestimate - the objection may continue - the fact that each metaphysical context favourable to the acceptance of the AP has a different degree of justificatory force connected with the degree of force of its metaphysical assumptions (i)/(iii). Hence, there may be obvious inter-connections occurring between the various contexts favourable to the acceptance of the AP. The stronger this network of AP-favourable metaphysical contexts is, that is the easier we are convinced by the value of a certain metaphysical picture, the easier it will be to accept the AP as justified on its basis. The objection may end by pointing out that, as soon as we try to explain the reason why man sometimes seems to take an interest in knowledge just for the sake of knowledge, we necessarily step out of the epistemological field of arguments to enter

into the metaphysical domain of descriptions. The metaphysical shift is inevitable, and once we have admitted this then all the metaphysical contexts $(C_{tel.})/(C_{psyc.})$ should lead us to the assumption of the AP.

The objection deserves a careful consideration because it throws some new light on the issue. It may be that the metaphysical shift is in fact inevitable, as the objection suggests. It may be that in order to solve the problem of why man seems to show some interest in knowing we need to step into a metaphysical description of certain states of affairs. The objection is, however, misguided. Its supporters misunderstand the nature both of this metaphysical step and of the methodological application of the economic principle to which I've appealed above. In the former case, the metaphysical step may be required only insofar as a description of the principle of the genesis of the process of knowing is concerned, but not its justification. We face the problem of explaining the phenomenon of the human never-ending search for knowledge. We put forward a hypothesis which consists of a certain description of a possible state, property or tendency of the human mind. Such a description can be understood as being metaphysical. But we support the assumption of this hypothesis epistemologically, by appealling to some logical or empirical reasoning or evidence.

Similar reasoning is available for the second point of the issue. Interpreted a` la Peirce[14] the Ockam's razor does not deny any value to metaphysical hypotheses, but it rather tends to limit the assumptions we should consider to be available. Certainly for a justification to be metaphysically grounded is not simply equivalent not to being a justification at all, so far so good. The objection goes wrong in

14) I'm here referring to the common view attributed to Ockam whereby 'entia non sunt multiplicanda praeter necessitatem' (entities must not be multiplied without necessity). Peirce [1958], vol. VIII, p.23, note 6, specifies that the principle expressed by that sentence was due to Durand de St. Pourcain. We shall meet this author again in section 7. For Peirce's law of parsimony, cf. for example [1958], 7.92. In a certain sense, it would be possible to adopt Ockam's razor literally, as far as the *vis cognoscitiva* is hypostatized into a mental force or entity, cf. next chapter VI.3.a.

assuming that this position is in contrast with Ockam's economic methodology: to reduce to the minimum the appeal to metaphysical hypotheses for which could be substituted more empirical and obvious equivalents. In our case, the elimination of a certain description of the genetic principle of the process of knowing, the *vis cognoscitiva*, is going to be replaced by another metaphysical description, what I shall define the *inertial conatus*. By submitting it to Ockam's-Peirce's economic test, we can hope that the conjectural presence of an *inertial conatus* in the human mind will be epistemologically better grounded.

The presentation of $(C_{tel.})/(C_{psyc.})$ aims only at making us aware of the origins of the AP in the history of philosophy. We can reasonably believe that the critical discussion of the AP has been left aside and delayed until now mainly because of these "friendly environments". Although the relation between philosophical contexts favourable to the assumption of the AP and the AP itself could be presented in terms of inferential reasonings from reasonable premises (i.e. descriptions of states of the universe) to equally reasonable conclusions (the acceptance of the AP, i.e. another description of another state of the universe), it would be pointless to argue against the value of the epistemological relation between the former and the latter. For it would amount to mistaking the *metaphysical contexts of the acceptance of the AP* for the *grounds of its epistemological justification*.

V.4 THE ACCEPTANCE OF THE AP AND "BOETHIUS' PARADOX"

The AP can be consistently embedded in different metaphysical pictures. Within such favourable contexts the AP perfectly succeeds in explaining the phenomenon of the human never-ending search for knowledge. These two factors should not be esteemed sufficient, epistemological reasons to make us accept the AP against the evidence we

have from our everyday life. The fact that, contrary to what is held by the AP, the great majority of men are not interested in knowing just for the sake of knowledge makes the AP so suspect as to give us the right to ask for a proper and valid justification of it. It may be that the phenomenon of the human never-ending search for knowledge can be explained by a more modest explanation concerning the human mind and its drives. Because of the paradoxical conclusion to which it leads, the assumption of the AP turns out to be in need of a strong epistemological justification. The fact that the AP is a possible explanation of the development of human knowledge throughout the centuries is not enough to overcome the outstanding difficulty. As the analysis of the issue unfolds, we shall see that no argument can really succeed in rendering the AP less questionable. This will be the topic of the next section.

One of the more effective ways of putting the plausibility of the assumption of the AP into question is by focusing on the contrast between its most direct consequence and our ordinary evidence. From the acceptance of the AP we can draw the conclusion that man in himself has to be defined as an epistemophilic knowledge-seeker: *human beings* (HB) can be distinguished from *animals* (A) according to whether or not they have the property of being epistemophilic (E):

D_{28}) for every A if A has among his property that of being E then he is also a HB, otherwise he is just an A.

Such a definition of man is tailored *by philosophers* on the prototype of man[15] *as a philosopher*. Although strictly speaking it does not appear in this formulation, being implicit in the assumption of the

---

15) As before in the text, in what follows I shall adopt the simpler and common use of referring by means of 'man' both to men and to women. Susan Haack, however, has made me realize that such a device could be sometime problematic as far as Greek philosophy is concerned, given the lower anthropological status 'enjoied' by women in ancient thought. It may be that when Aristotle said 'anthropoi' he was merely referring to 'male beings', although for this purpose he could have used 'androi'.

AP, D_{28} is differently endorsed by all the philosophers we have met in the previous chapter, Aristotle, Albert the Great and Thomas Aquinas.

It is immediately obvious that the problem with D_{28} is that if we relate it to our ordinary evidence then we obtain the paradoxical conclusion that:

P) most of the time the great majority of men do not actually satisfy the *conditio sine qua non* (i.e. having the property E) for being considered *more than* animals (A).

The conclusion that most of the time the great majority of men are, or behave like, animals because they are not philosophers is hardly tenable. Through D_{28}, the assumption of the AP turns out to lay down such a strict conception of man that the majority of men are left out of it.

The outlines of the problem are well recognized by the supporters of the AP, from Aristotle to Thomas Aquinas. The author who probably came closest[16] to the paradoxiacal formulation given above is Boethius of Dacia.[17] In his short work *De Summo Bono*, he writes:

"Although all men naturally desire to know, yet very few of them, and this is a pity, abstain dedicate themselves to the search of wisdom, all the others being prevented from such a great good by their disordered desires"(lines 110-112, p.373, my italics).[18]

And the straightforward implication of such assertions had already been stated three pages before:

Against whom [i.e. those who don't follow their natural desire for knowledge] the Philosopher says: 'Be careful, all of you men who are counted among the beasts, you who don't understand what is divine in yourself' (lines 19-21, p.369-370, my italics).[19]

---

16) What Boethius has in mind, however, is no more than very close to our paradox. This because of the context, which is an ethical discussion of the highest good for man, identified in God's knowledge. Obviously it is one thing to say that all men are sinners also because they forget about their highest good and another thing to say that the majority of human beings is not to be called, properly speaking, *human* because of a lack of the epistemophilic characteristic. Boethius is interested in the former, ethical condemnation of humanity, not in the latter.

17) Cf. Boethius [1976], pp.369-377 and Wieland [1982], p.681.

18) "Cum enim omnes homines naturaliter scire desiderant, paucissimi tamen hominum, de quo dolor est, studio sapientiae vacant inordinata concupiscientia eos tanto bono impediente".

19) "Contra quos Philosophus dicens: "Vae vobis homines qui computati estis in numero bestiarum ei quod in vobis divinum est non intendentes"".

The desire for knowledge is described as inborn and natural. And against those who lack any interest in knowing, Boethius echoes the Aristotelian[20] execration: they are like animals that don't understand the highest quality of man.

There are different reasons why "Boethius'paradox" was not taken to be a strong counter argument against the assumption of the AP itself, either by Boethius himself and by other philosophers in the same tradition. First of all, we need to recall that philosophers accepting the AP are likely to work within one of the AP-favourable contexts. This could already cast doubt on the paradoxical conclusion implicit in the aceptance of the AP. In many cases the AP is a mere appendix to more crucial metaphysical issues. Second, for an Aristotle-like approach or more generally for a Greek philosopher, to set high standards in order to consider someone a real man might not be an inconvenience at all. In an elitist society where men can be made slaves P might not sound very paradoxical. On the contrary, it helps to maintain a clear distinction between a restricted class of people, who can afford to study, and the great majority of the population who have to work to survive. We should not underestimate the fact that Aristotle considered leisure and the possibility of having free time the first, necessary condition for philosophizing.[21] This second consideration, however, is somewhat more problematic as far as a medieval philosopher like Boethius (but see also Albert the Great and Thomas Aquinas) is concerned. A medieval philosopher cannot share the same Greek aristocratic vision of men, at least not without taking into account the notion of man's freedom and that of equality among human beings. In their comments on Aristotle, Boethius, Albert the Great and Thomas Aquinas actually feel the

---

20) The 'Philosophus' in the second passage is Aristotle, and this quotation occurs very often in Latin philosophers, yet it has not been possible to retrace whether, and if so from where in Aristotle it has been taken (cf. the Latin commentary to the sentence just quoted, p.369, note 19-21.)
21) Cf. Lear [1988], p.2 and note 2 for the Aristotelian references.

necessity of justifying the presence of this apparent contradiction: why a tendency towards virtue and knowledge which has to be supposed natural and spontaneous cannot in fact be considered common to all men. The answer is the same in the three authors, and we have seen in the second quotation from Boethius that it basically refers to the negative influence of physical or mundane passions.[22] Man would be prevented from pursuing knowledge just for the sake of knowledge by the desire for other minor pleasures, like sensual experiences, that are easier to obtain. It is very interesting to note that among these poor and inferior pleasures there is also *perceptual knowledge* in terms of *sensations*. This is a bit odd because in the next section we shall see that perceptual knowledge and the pleasure connected to it is considered by Aristotle a *sign* of *epistemophilia*, and eventually a proof in favour of the validity of the AP. For the time being, however, we are told by medieval philosophers that this physical knowledge could be one of the origin of the difficulties faced by man in following his otherwise natural and spontaneous *vis cognoscitiva*. By shifting from Greek to medieval philosophy, an elitist vision of man including a positive understanding of sensations is substituted by a more equal vision of man as a free person, yet connected with a more suspicious interpretation of sensations. Despite the differences, both visions endeavour to maintain the value of the AP against the paradoxical conclusion that it implies. They ground the assumption of the AP within strong metaphysical contexts and strengthen the conception of man as an epistemophilic knowledge-seeker by means of an *ethical conception* of the *vis cognoscitiva*. From Aristotle to Thomas Aquinas from Fichte to Gadamer, the AP individuates a potentiality in man of becoming a philosopher. The actualization of

---

22) Cf. Boethius' *inordinata concupiscientia* (*De Summo Bono*, 112), Albert the Great's *violentia passionum* (*Metaphysica* c.5, 6) and Thomas Aquinas' *voluptatibus* (*Commentaria*, I.I.4). Thomas Aquinas, however, is the one who gives the most articulated typology of reasons (*ibidem*).

such a potentiality is preached as leading to a higher "ethical" state of humanity.

This is in agreement with what I said before about the two alternatives left open to the supporter of the AP. Once a philosopher supporting the AP faces "Boethius'paradox", he can either decide to consider the AP as a sort of prescription or, if he still wants to take it as a description, he will need to put forward a "deeper" understanding of the nature of man in order to bypass the problem raised by our ordinary experience. In order to repair the damage made by the striking conclusion of , the supporter of the AP is forced to introduce some additional, ad hoc clause. For example, he may object that in "P" the "actually" clause plays an important role in attenuating its paradoxical aspect. He accepts that as long as man does not behave philosophically he is not a real man, the real human nature being exemplified by the philosopher. But he could argue that despite our ordinary evidence, the majority of human beings have the possibility of becoming real men, that is philosophers. Unfortunately, we already know that ad hoc clauses, such as this appeal to the development of a potentiality, refer to the metaphysical contexts within which the assumption of the AP finds some favourable grounds. And the appeal to metaphysical grounds in order to show that D_{28} is still acceptable despite the paradoxical conclusion P, does not attenuate the disruptive, epistemological force of "Boethius'paradox". Not only because a metaphysical backing of the assumption of the AP does not count as an epistemological justification, but also because it brings into consideration still more controversial notions, whose acceptance, in turn, would need considerable epistemological justification. The tenacity in maintaining the value of the AP shows only how much of ordinary evidence the philosopher in question is ready to sacrifice in order to stick to his picture of the world and of man within it.

An important consequence of "Boethius'paradox" is that it makes clear where the burden of proof lies. The description given by the AP to explain the human never-ending search for knowledge refers to the presence of a desire for knowledge for its own sake in the human mind. From an empirical point of view such a *vis cognoscitiva* is far from being evident. Let us remember that we are not speaking of a *tension towards vital information* necessary for survival (not even if we understand this latter in a very broad sense, so to include, for example, those pieces of knowledge necessary to be able to use a telephone in a modern society) or of mere *curiosity*, such as that concerning someone else's business. Rather, the AP refers to *intellectual knowledge* and to the pure love of investigation into the real nature of things, just for its own sake. How many people do we know, even among those who *actually seem* to pursue knowledge for its own sake, would still do what they are doing if they were alone, if they were the last person on earth, and yet with all the comforts that our age may provide ? I believe not many, certainly not most of them. The AP is a controversial explanation of the search for knowledge. Our ordinary evidence makes the AP largelly questionable and in want of an epistemological justification.

The location of the burden of proof has an obvious link with the economic principle of Ockam (if in doubt eliminate the *vis cognoscitiva*) and it is very important for the solution of the Traumatic Doubt, the problem which underlies the necessity of giving a critical analysis of the AP. For if there are no good reasons to accept the AP as a principle of the genesis of P-knowing, and there are good reasons to believe that the AP is untenable, then a *fortiori* there is no reason to maintain its problematic assumption within the context of the genesis of the Traumatic Doubt. But then this latter might be solved by simply realizing that the eventuality that "reality in itself may be completely

different from what we take it to be" may not be a real problem. This amounts to the procedure of emptying the Doubt of its Traumatic value, a possibility whose value it is the final goal of the second part of this work. But this is already anticipating the content of the next chapter. At the moment we need to consider the argument in favour of the assumption of the AP.

V.5 AN ABDUCTIVE JUSTIFICATION OF THE ACCEPTANCE OF THE AP

We have seen that there are various "AP-favourable environments" that can disguise the assumption of the AP as unproblematic. We have also seen that the acceptance of the AP gives rise to such a paradoxical conclusion that, unless properly supported by an epistemological argument, it is untenable. We are now going to see how the epistemological argument in favour of the acceptance of the AP equally fails to support the AP against our ordinary evidence.

Above, I referred to the different attitudes the supporters of the AP can show towards the phenomenon of "pleasure in sensations". On the one side, it is presented as a means of answering to "Boethius' paradox"; on the other side it is thought of as constituting the premise for a possible argument in favour of the AP. In this latter sense, considerations about the phenomenon of "pleasure in sensations" can be condensed into an abductive justification of the AP. On the whole, this represents the second type of grounds on which the assumption of the AP can be based, and as such it deserves all our attention.

The general formulation of the abductive justification of the AP can be first found in Aristotle himself.[23] In explaining his dictum, Aristotle endeavours to give some reasons why he believes that all men

---

23) Cf. *Metaphysics*, I,I, 980a 1, 980b 24.

by nature desire to know. For this purpose he says that a *sign*[24] of epistemophilia is that men enjoy *perceptual activities*, especially sight. The argument can be enriched by adding that many people seem to enjoy *intellectual* activities, like solving puzzles, which are completely gratuitous. All these can be further *signs*, this time perhaps at a more speculative level, that in fact man naturally tends towards the acquisition of knowledge for no other reason than the pleasure he takes in knowing. The reasoning may be put this way (where AJ stands for Abductive Justification of the acceptance of the AP):

AJ) as a matter of fact, man enjoys (i) sensations for their own sake and (ii) purely intellectual activities for their own sakes. Since (i) and (ii) are signs of the presence a *vis cognoscitiva* in the human mind, then there is a tension (*vis cognoscitiva*) in the human mind that renders man a knowledge-why-seeker. An appeal to such a tension explains the other human phenomenon of a never-ending search for knwoledge.

The formulation of the AJ tries to cope with the problem arosen from "Boethius' paradox". Unfortunately, the goal of an epistemological justification of the AP remains largely unfulfilled. There can be two interpretations of the AJ, one improper and the other proper. On a closer analysis, the proper interpretation of the AJ turns out to be too weak to be able to support the assumption of the AP against our ordinary evidence. Let me first dwell on the improper one. Its discussion will introduce the second kind of interpretation of the AJ.

The first interpretation of the AJ is improper because it fails to recognize the abductive nature of the AJ accusing it of running into a logical fallacy. According to it, the AJ would suggest that we must accept that if there is a phenomenon like human epistemophilia this would necessarely manifest itself through other phenomena like (i) and (ii); however, since there are indeed phenomena like (i) and (ii) and we have accepted that (i) and (ii) are necessary signs of a *vis*

---

24) Aristotle's Greek word is precisely *semeion*, that both Albert the Great and Thomas Aquinas translated as *signum*.

cognoscitiva, then we must also admitt that there is a *vis cognoscitiva* that counts as their source, and hence that the assumption of the AP is justified. This interpretation misunderstands AJ for a the following falacious deductive argument: it is necessary that [if (there is something like a *vis cognoscitiva*) then (there would be (i) and (ii) as signs of it)]; it were derivable the conclusion that: there are (i) and (ii) and so it is necessary that there is a *vis cognoscitiva*. This is a classic fallacy.[25] Suppose we say that the possession of the philosophers' stone has as a necessary *sign* that of making its owner a rich person. It is more than reasonable to assume that if someone were in possession of a stone that transforms every metal into gold then that person would necessarily be rich, and that this latter condition would be a consequence of the former, and therefore that the possession of the philosophers' stone would also be manifested by the fact that its owner would be transformed into a rich person. All this, however, is far from justifying the inverse reasoning, that if John is rich this is an inconfutable, necessary sign that he owns the philosophers' stone or, less strongly, that if John is rich this is a very good reason to believe that he has the philosophers' stone. This kind of inference is just a *non sequitur* due to a simple fallacy concerning the position of the modal qualifier.

If the former improper interpretation of the AJ can have any positive effect at all, it can do so only by underlining the importance of a correct understanding of the middle clause of AJ attesting that (i) and (ii) are *signs* of the presence of a *vis cognoscitiva* in the human mind. The justificatory force of the AJ in respect to the assumption of the AP lies not on the deductive and necessary relation, but rather on the probable connection between on the one hand a pleasure in sensations and in the satisfaction of both a desire for a playful mental activity

---

25) This is a version of that fallacy, already mentioned in chapter IV note, due to the shifting from a *necessitas consequentiae* to a *necessitas consequentis*.

and of curiosity, and on the other hand the possibility of there being a *vis cognoscitiva* in the human mind. Properly understood, the AJ can only support a *more or less probable* relation between these phenomena and their possible source. If we can assume that a certain *sign-something* is generaly the only and most important sign of the presence of a certain *source-something*, then given such a *sign-something* we are allowed to presuppose with the highest level of probability the presence of its *source-something*. However, in the need for a justification of the assumption of AP exactly the connection between (i) and (ii) as *actual signs* of the *vis cognoscitiva* is at stake. And the AJ can employ the *vis cognoscitiva* to explain the never-ending search for knowledge only because it presuposes the *vis cognoscitiva* as the source of the pleasure in sensations. Although (i) and (ii), logically speaking, *could be* signs of the presence of a *vis cognoscitiva* in a human mind, this is far from saying that they are *in fact evident signs* of it. Although there may be some truth in reasoning that if there were something like a *vis cognoscitiva* it would be reasonable to suppose that this would express itself also through a pleasure in sensations, in the satisfaction of our curiosity and of our desire for playful mental activity, this is far from saying that the indubitable presence of these "phenomena" should count as a sign of the more questionable presence of a *vis cognoscitiva* as their unique source. The pleasure we take in sensations and in solving puzzles could be easily explained without any reference to the AP. So all we need to concede to the supporter of the AJ is that there is a *logical possibility* that (i) and (ii) can be signs of epistemophilia. The supporter of the AJ, on the other hand, must admit that it is controversial when (i) and (ii) can count as real signs of the presence of a *vis cognoscitiva*, and indeed it is very doubtful whether they can be *in fact* signs of it at all, and whether we need to appeal to the notion of *vis cognoscitiva* at all in order to explain

them. Given what is suggested by our ordinary evidence, the AJ cannot be employed to defend the assumption of the AP. The AJ can introduce the AP as a satisfying hypothesis which succeeds in explaining phenomena like the human never-ending search for knowledge, human edonism, human desire to play mentally, or human curiosity. But the contention is that the AP is too strong an assumption. The AP seems to be an unnecessary and unjustified hypothesis which is too powerful because in order to do its explanatory job it needs to pose the presence of a *vis cognoscitiva* in the human mind, creating *ex nihilo* a human epistemophilic tendency. And in this respect the AJ is largelly ineffective for the justification of the assumption of the AP which cannot resist the opposite "pressure" coming from our ordinary evidence. The AJ relies on the assumption of the AP, it cannot support it.

Once again, the adoption of the AJ within an "AP-favourable environment" can have contributed to the uncritical acceptance of the AP, but it is thoroughly ineffective once the value of the AP starts being seriously challenged.

V.6 THE ANALOGICAL GROUNDS FOR THE ACCEPTANCE OF THE AP

Since the beginning of the last chapter (cf. IV.2.b) I said that it was important to translate the Greek "oregontai" occurring in Aristotle's sentence by means of "to have a conation which drives x towards y" in order to uncover what I suspect is the image-analogy that underlies the acceptance of the AP. Time has come now to focus on this last type of "grounds" on which a favourable attitude towards the AP may have been allowed to flourish. Although I presume that the analogical reasoning has been historically very influential in the acceptance of the AP, there are no explicit statements in the philosophers so far taken into consideration to which I could appeal unquestionably.

Therefore, the present and the next sections present only a series of conjectures. I find them largelly justified, but I cannot guarantee them to go unchallenged. Since it is impossible to discuss all the implications of the issue in detail, I will be very sketchy.

An *implicit* analogy between *knowing and moving*, an association between the *nature of dynamic, driving forces* occurring within the physical world and the concept of a *vis cognoscitiva* might have favoured the acceptance of the AP as an explanation of the never-ending search for knowledge. Let me explain. The Aristotelian Physics may have tacitly contributed to the uncritical acceptance of the AP insofar as this latter can be interpreted in terms of an anthropological vision of the human mind pushed towards a never ending acquisition of knowledge-why by her own *vis cognoscitiva*. It will be remembered that in the third chapter I introduced many different theories of knowledge by means of simple graphic schemes. Those have been elaborated basically in terms of arrows connecting HKS and ER. This dynamic image of knowledge as a bridge which goes *from the subject to the object* is connected to my analogy of a chess game, where a HKS plays the white and ER the black. I believe that such a vision of intellectual knowledge as a *dynamic movement from HKS towards ER* is more than a mere manner of speaking. It is a dynamic image that fundamentally characterizes knowing as "extro-verted" in the philological meaning of this adjective (I've writen it with a hyphen in order to underline this particular use), that is, from the perspective of the human knowing subject, knowledge would be a *movement primarily directed from the knower to the known* because it would be due to a dynamic genesis internal to the HKS.[26]

A first generic interpretation of knowing as a movement towards reality and what is known is strictly connected with the idea of

---

26) To this image is strictly connected that of "knowledge" as a more or less subjective or idealistic *projection* of mental contents on external reality.

discovery and travelling. It is once more the idea of Ulysses as the prototype of the Cartesian man. It is not by chance that Bacon's favourite image to represent the enterprise of knowledge was the voyage-metaphor. He even transformed it into a visual emblem in the *Instauratio Magna*. On the title-page of the book there is a ship sailing between the Pillars of Hercules into the open sea with the motto "Multi pertransibunt & augebitu scientia".[27] According to the Baconian analogy, the "extro-verted image" of knowing implies that it would be man who "epistemically attacks" reality, and reality which "defends" itself.

It wouldn't be necessary to take into account this general and nowadays rather obvious metaphorical interpretation of knowing as a way of "going towards" if it were not because it throws light on one of the factors which have helped to maintain the acceptance of the AP unquestioned. For such a general analogy between knowing and travelling introduces us to a deeper and more controversial association between the hypothesis maintained by the AP and the physics of dynamic movements.

According to the Aristotelian Physics certain movements are natural and others violent. Those natural don't require any external cause because the moving body has within itself an intrinsic principle, acting either as an efficient cause, like the "soul" in the living things, or as a principle producing characteristic spontaneous motion in a particular environment, as in the motion of bodies towards their "natural places".[28] Everything has its natural place in the universe, a natural place which therefore everything is trying to reach. On the other hand, the basic principle of Aristotle's dynamics insofar as "violent" motion is concerned is that "whatever is in motion has been moved by something else" ("omne quod movetur ab alio movetur"): motion is not a state (as for Newton) but a process, and a moving body would cease to move unless continually acted on by a moving force.

---

27) Cf. Steadman [1971], p.35
28) Cf. Crombie [1959, p.61.

The analogy I suspect to be at work between man being naturally driven towards knowledge and the movement of a body[29] refers to these two conceptions of the genesis of motion. The notion of natural *movement* may have suggested, analogically, that man has his "natural place" within the kingdom of full knowledge. "Knowing" could be just a spontaneous motion of man going towards the realisation of full knowledge as his natural place. Considering the AP I have the impression that the metaphorical traveller is moved in his investigation by a spontaneous tendency to reach a place which belongs to him, a position which only represents the full development of his human nature. The notion of violent motion, on the other hand, may have suggested another interesting analogy between the *vis cognoscitiva* and a force of motion exercised from one part of the mind on the other. Once again, the AP seems to suggest, almost visually, that during the process of knowing man, who according to the nature of "natural motion" is proceeding towards his natural place, is continually pushed further by the *vis cognoscitiva*, which is what activates the cognitive processes. The *vis cognoscitiva* is the metaphysical force that determines the epistemic voyage.

The picture that derives from these two perspectives is that, analogically, the epistemophilic *impulse* described in D_{26} and that is supposed to be active in every man has two "dynamic" faces: on the one hand "knowing" represents a "natural motion" of man towards external reality and its knowledge, where "natural" is to be interpreted "in full harmony with the rest of the universe"; and on the other hand the *vis cognoscitiva* is a sort of mental *motor* which drives the whole process of knowing, so that the *principle of the genesis of the process of knowing,*

---

29) In this interpretation all the Aristotelian thought about topics like the passage from *potency* to *actuality* and the theory of *change*, and also as this was received by medieval philosophers, is involved. For a more specific discussion I can only refer once more to Lear [1988], especially chap.s 1-3. For a survey of the main themes of the science of motion in medieval philosophy cf. Weisheipl [1982], pp.521-536.

is conceived as a dynamic principle tending towards external reality.[30]

The analogical reasoning (AR) that may underlie the acceptance of the AP can be formulated thus:

AR) "knowing" is a process; as such it entails the modification of something, the knower, which through the process of knowing moves from a state of ignorance to a state of cognisance, which in turn is the natural state more suitable for the man-philosopher. But if knowing is a way of moving either towards the known or simply towards knowledge, then it must be due to some sort of driving force. This later is identifiable in the *vis cognoscitiva*, which is both a spontaneous and a natural tendency of reaching intellectual knowledge and a sort of unmoved mover of the cognitive processes.

The conjecture suggests that a philosopher working with an Aristotelian picture of the physical world and of its forces and an Aristotelian explanation of the nature of motion, may have been more easily led to accept the AP uncritically, because of the conceptual closeness of this latter to the former. We would find, I suspect, that many philosophers have been motivated by various understandings of such an analogy. I have the impression that the large success of the AP has also been due very often to the simple analogy on which it seems to be implicitly grounded: the idea of knowing as a way of stretching our hands towards, of reaching out to the objects of knowledge, of getting closer to reality, of moving towards the more objective aspects of the world, of escaping from the subjective state.

I shall turn to the nature of the dynamic analogy in the next chapter. There I will introduce the formulation of an anti-Aristotelian Postulate by focusing on the development of the analogical reasoning once the concept of *inertia* comes to play a central role in the explanation of motion. I think it is plain that if the analogy knowing/moving can do any good work, heuristically, then it would be pointless to argue against the Aristotelian picture. Eventually, all we

---

30) Without this specification there may be some confusion in the next chapter when I will be speaking of a static and a dynamic interpretation of the principle of the genesis of P-knowing. Also the latter option is still working within the motion-analogy, and it only objects against the interpretation of the origin of the movement.

need to do is simply *replace* it by a more updated version, say a Newtonian interpretation and note the changes. Hence, for the time being I will limit myself to investigating further some crucial implications contained in the general conjecture put forward in this section. This may also help to indicate its value.

V.7 THE DYNAMIC IMAGE OF THE PROCESS OF KNOWING AND OF ITS GENETIC PRINCIPLE

The uncovering of the analogical reasoning, as an additional grounds on which the acceptance of the AP might have been favoured, has an enormous consequence for our understanding of the historical roots of the AP. For the analogy between knowing and moving seems to have a very central role not only in the understanding of the conception of man as a knowledge-why-seeker, but also in the interpretation of the Aristotelian distinction between a *passive* and an *active mind*, and of the medieval roots of the concept of *intentionality*. The three issues, i.e. the AP, active/passive mind and intentionality, may all have a common analogical background. Indeed, they may belong to the same conceptual scheme. And this would imply that a modification in our conception of the principle of the genesis of the process of knowing could not leave untouched our understanding of the concept of intentionality and of the Aristotelian distinction between the two *Nous*. Although obviously this hypothesis cannot here be fully articulated, in this section I wish to sketch at least two further conjectures.

The first conjecture concerns the possibility of interpreting the evolution of both the Platonic and the Aristotelian traditions in epistemology as already containing within themselves the possible prevalence of what I've called above the "extro-verted" conception of the process of knowing, and therefore as tending, in the long run,

towards the elimination of the ontic contribution of ER to the occurrence of the process of knowing, an elimination finally carried out by the Cartesian revolution. The "extro-verted" interpretation of the dynamic image of knowledge is very popular in western philosophy. So much so that with an eye to the final prominence it reaches in modern, post-Cartesian philosophy, the Platonic and Aristotelian epistemological traditions can be seen as gradually developing towards the final "purification" of the conception of human knowlegde from any "passive", "intro-verted" (that is "coming from external reality") or "ontic" understanding of the initial stage of the process of knowing, represented by perceptual knowledge. The Platonic tradition, on the one side, strongly stresses the responsability of HKS to reach a valid knowledge of reality by means of an internal investigation of the truths already present in his mind. As Agustine said "Noli foras ire, in te ipsum redi, in interiore homine habitat veritas"[31]. The role of a possible external input is very much underestimated. On the other side, the Platonic tradition solves the apparent problem represented by a "passive" conception of perceptual knowledge - a stage in which ER would semm to "go towards" HKS - in two ways, by reinterpreting perceptual knowledge either as irrelevant to the understanding of the nature of human knowledge, or by rendering it actually more "active" than it would appear at a first sight. In the former case perception becomes a sort of background condition for intellectual knowledge. As such it doesn't represent an instance of real knowledge, and the fact that in perception ER, and not HKS, seems to play the chess-game with the white, is disregarded in favour of a noetic approach. Human knowledge is primarily mental knowledge of ER, and in so far as mental or intellectual knowledge is concerned, HKS plays the first and most important role, although we must wait until Bacon to consider it an aggressive one. In

---

31) "Don't go out. Come back into yourself. Truth lives inside man". Augustinus, *De Vera Religione*, 39.

the latter case, especially from Plotinus[32] on, perceptual knowledge starts being interpreted as a *way of being* active in terms of *being selective or anticipating*. Perception is no longer a mere *reception* of an external input, but it becomes another way of going towards ER by means of the senses which, in search of sensations, would operate a first, crude *selection* and *anticipation* of information concerning the external world.

The hypothesis that the history of epistemology before Descartes tends, in the long run, to encourage a conception of knowledge as a *way of going towards ER* may sound much more controversial as a way of interpreting the Aristotelian-Scholastic tradition. It could seem odd to interpret the tradition that goes up to Locke and which supports the conception of a human mind initially passively receiving brute information from outside, as if it were also striving to support a purely "extro-verted" dynamic image of knowledge. Nevertheless, just as in the Platonic tradition, also in the Aristotelian tradition we are faced by a distinction between perceptual knowledge and intellectual knowledge, and then by a re-interpretation of the former on the basis of the "extro-verted" characterization of the latter. First of all, as I tried to make clear in chapter 3, the Aristotelian tradition does not assign the title of "knowledge" to the first, perceptual step of the cognitive process, that which is made by ER in impressing a first empirical input on the knower's mind. Perception is not yet knowledge, for knowledge is only intellectual *episteme* of eternal truths. Therefore, in so far as this tradition endorses an "intro-verted" dynamic image of perception (i.e. the process of knowing would start with a movement from ER to HKS) this latter is not prominent for the understanding of knowledge. Secondly, and I would say more importantly,

---

32) Plotinus made the greatest step in this direction by taking seriously the idea of interpreting perceptual knowledge not just as merely passive, but as depending on an *active disposition* of the HKS to receive information from outside.

the first empirical input coming from outside is considered a second step, made possible by an already actualized potentiality. As Lear clearly explains:

> [According to Aristotle] Our coming to understand the world is based on our interaction with nature, an interaction which occurs according to basic natural principles of causal interaction. But there is no way to explain this interaction on the basis of our (passive) mind and physically embodied form alone. Active Mind is the prior actuality needed to explain how thinking occurs in the individual. ([1988], p.139).

It may even be said that the Aristotelian-Scholastic tradition supports an *internally* extro-verted dynamic image of knowledge. In perceptual knowledge HKS doesn't go towards ER but he is supposed to go towards the impressions ER has left on his mind, rather in the same way we would be prepared to meet someone half-way, going towards him.[33]

Hence, not only in the Platonic tradition, but also in the Aristotelian-Scholastic tradition we find the possibility of interpreting "knowing" as a way of "moving towards", and therefore the possibility of a dynamic interpretation of the principle of the genesis of P-knowing, of the *vis cognoscitiva* as a spontaneous, inborn driving force. The two traditions join together in the project for an *internal foundation of knowledge* represented by the Cartesian foundationalist enterprise in Epistemology, a project that has engaged so many epistemological studies in modern and contemporary philosophy. When

---

33) Although it refers principally to the capacity of determining physical self-movement in animals, this interpretation is expressed rather clearly by Wedin [1988]:
"So even though the object of desire, the *orekton*, is required as an unmoved mover, the animal remains in some sense a self-mover.* [...] Another and, I think, a more important reason [explaining the fact that an animal is a self-mover] is that conformity with naturalistic causal principles provides a general and plausible explanatory framework. Here the fact that objects of desire and perception are external is an obvious desideratum. In particular, we save the principle that what produces change is something actual, the object of desire [i.e. in our case 'knowable external reality']. Nonetheless, because the object is something like a final cause *the soul itself, more precisely the faculty of desire, remains the efficient cause of the animal's movement*. It is precisely in this sense that animals are self-movers. [...] I am, then, distinguishing between self-mover and unmoved mover. Mind at the *intentional level* is a self-mover, not an unmoved mover. It is only productive mind [i.e. our Active Mind], located at a lower level in the system, or better, what it produces that is the *analogue* to the unmoved mover.**". (p.217, my italics). (*) [Wedin's note] For more on this see Furley [1978]; (**) [Wedin's note] That Aristotle extends the principle to thought is clear from [*De Anima*] 431a1-4.

Descartes starts working on the possibility of providing a foundation for his mental representations that could reassures him on the their trustworthness, the Platonic "internalism" is joined to the conception of an Aristotelian "active mind" busy in producing and justifying her own representations, and all this in total dissociation from the intrinsic nature of external reality, hence from any eventual "suggestion" coming from outside. The second half of the Classic and Medieval conception of knowledge, the harmonic partecipation of ER into the production of a fair picture of the world, is finally lost together with the Aristotelian metaphysics. What remains for the moder philosophers is an internal driving force, the *vis cognoscitiva*, thwarted of any access the intrinsic nature of ER. According to the new Cartesian picture, all human knowledge is interpreted as a body of beliefs whose ground must be found within the mind of the knower, thanks to certain "mental properties" such as clearnes, distinction, certainty and the like. Knowledge as a bridge between HKS and ER finds its deepest foundation in the subjective side. The *cogito*, from this perspective, could have been formulated perfectly well in terms of *vis cognoscitiva*: *naturaliter scire desidero, ergo sum*. This, together with a veridical God is thought to be enough to lay down the foundation of knowledge. From Descartes on, knowing remains a sort of movement from HKS towards ER that is thwarted of any guarantee to be able to reach the final target. This "movement" is internalized in a *foro interno*; "knowing" as "moving" can be interpreted as an internal movement of part of the mind towards the data received from the external source and somehow stored in another part of the mind. So just at the historical point when science begins to obtain significant results, increasing the conception of knowledge as a powerful way of dominating/manipulating external reality, philosophy at the same time loses its faith in the possibility of knowing reality in itself, for it has already lost any notion of a

possible ontic contribution of ER to the final cognitive product. The evolution of knowledge into an aggressive instrument of calculation, prevision and modification of reality at the same time extinguishes the last remains of a notion of the process of knowing as a collaborative enterprise between HKS and ER. The higher human knowledge raises her voice to proclaim her power, the more difficult it becomes to conceive of any possible contribution to the epistemic entrprise coming from ER.

Broadly speaking, we could say the same force that shattered the harmoic picture provided by the Aristotelian *metaphysics*, i.e. Nominalism, was also responsible for the break down of the idea of an "*epistemological* *collaboration*" between HKS and ER. By raising perception and cognition of particulars to the status of proper knowledge, Nominalism promoted in the long run the dichotomy between subject and object, without being able, at the same time, to resist the pressure coming from the "extro-verted" vision of the process of knowing to interpret perception as also subjectively determined. If there is nothing in common between ER and human mind, if matter has its own properties which have to be discovered without thinking that in the process of knowing the human mind - by actually becoming these forms - has already acquired the universal forms according to which matter is ordered, then we seem to lack any bridge between the two kingdoms of mind and reality.

The possibility portraied by the Traumatic Doubt becomes an ever greater challenge. The full success of an "extro-verted image" of the process of knowing had not been possible without the Cartesian schism between man and reality, between the necessarely subjective state in which the human mind seems now to find herself, and which includes also physical perceptions, and the states of the world outside the anthropological "prison". It is worth noticing that if the Aristotelian project of combining a "worldly mind" and a "mentally-pervaded world" in

one harmonic picture faltered under the Nominalist attack, the Platonic metaphysics, with its separated worlds, may have helped in the constitution of the final Kantian dichotomy between phenomenal and noumenal realities. From Kant on we are left with the serious possibility that the Traumatic Doubt may turn out to be true: reality may be completely different from what we take it to be.

I believe that, if there is any truth in this general understanding of one of the directions followed by the development of the epistemological tradition, then one of the key issues in the whole picture becomes the possible development of the distinction between Active and Passive Mind, in the Aristotelian-Scholastic philosophy, into the concept of intentionality.[34] In this way we come to the second conjecture, that concerning the possibility of retracing a development in the evolution of the notion of an active mind driven by her *vis cognoscitiva* towards reality into the conception of the intentional property of the human mind of being directed towards mental or physical objects. This second conjecture calls into question such a large part of the history of our philosophy that here, once again, I can only sketch its main lines. To start with, I would suggest that if the Active Mind is what makes the process of knowing starting or better "moving", then as such the *vis cognoscitiva* may be seen as a part of it. Despite the passive conception of perceptual knowledge, the Aristotelian-Scholastic tradition individuates the first spark of that complex motor that is the process of knowing on the human side of the relation, not on the external side of reality. We have just seen that in the long run the perceptual input from outside may terminate as merely the occasion for the actual generation of knowledge. The further conjecture I'd like to suggest is that, once the distinction between Active and Passive Mind

34) For the terminology and a scholarly explanation of the distinction cf. again Lear [1988], chap. 4, sect. 4/5.

became obsolete, the very simple idea that knowledge had its first primordial origin in a spontaneous, natural, inborn extro-verted effort of the human mind, was slowly inherited by the concept of intentionality. Some facts about the history of the development of the concept of intentionality are well known. On the one hand, we need to remember that a great deal of contemporary philosophy deals with the concept of intentionality. The major figure in the revival of intentionality was Husserl and despite important differences his ideas can be traced to Brentano. In turn, Brentano's work has its origins in the Scholastic concept of "intentio", and probabaly in his study of Aristotle's psychology.[35] On the other hand, if we proceed from the debate on the active/passive mind towards the introduction of the concept of *intention* we notice that Averroes speaks indifferently of *intellectus activus* and *vis cognoscitiva*[36]; that the concept of "intentio" was first introduced by Durandus de Saint-Pourcain[37] who was also one of the first medieval philosopher to refuse to admit the presence of a Passive Mind beside the Active Mind. The peak of this process was reached during the Reinassance, just before the Cartesian Revolution, and is represented by Francesco Patrizzi, a philosopher who combined Platonism and Aristotelism. In his philosophy the idea that the mind, which is now only the Aristotelian Active Mind, is driven towards knowledge by a sort of epistemophilic impulse, and this concept is joined to the notion of a desire for knowledge just for the sake of

35) Things can be made more complex. For, Chisholm, the strongest supporter of a foundationalist and internalist (and therefore Neo-Cartesian) approach to the analysis of knowledge in terms of Justified True Beliefs, has studied Brentano's philosophy (he is the editor of Brentano's work in English) and devoted particular attention to the possibility of distinguish between intentional from non-intentional phenomena (cf.Chisholm [1984]). And Brentano, in his turn, had devoted a particular attention to Aristotle's psychology and his concept of Active Mind (cf. Brentano [1977]), while Husserl, on the other hand, was very interested in the Cartesian discovery of the *cogito*, as this is clear from one of his posthumous work, *The Cartesian Meditations*. An additional twist to the complex nature of the issue will be given in the next chapter (see also note 43 of the next chapter).
36) Cf. Gilson [1955] pp.223-5
37) Cf. his *Questio de Natura Cognitionis*. Gilson [1985], pp.473-6 is extremely clear on this point, and his introduction to Durandus' thought supports my thesis (cf. also note 86, pp.774-6).

knowledge and then to the concept of intentionality as "intentio cognoscentis in cognoscibile".[38]

If it is historically possible to suppose that much of what was included in the concept of an Active Mind had been inherited by that of intentionality, the theoretical aspects of the issue seem to confirm this possibility. As Brentano says:

> The common feature of everything psychological [...] consists in a relation that we bear to an object. The relation has been called intentional; it is a relation to something which may not be actual but which is presented as an object.*
> *) A suggestion of this view may be found in Aristotle: see especially *Metaphysics*, Book V, Chapter 15, 1021a 29. The expression "intentional", like many other terms of our more important concepts, comes from the scholastic. ([1969], p.14, including note 19)

The comment[39] indicates that Brentano should not be taken as saying that intentional objects must exist, for the objects of psychological attitudes need not exist. What Brentano means by an intentional property of our psychological activity is precisely just that sort of "directedness", as Husserl[40] will call it later, which is absolutely free and not determined by the actual presence of an object apprehended.

According to Husserl:

> If an intentional experience is actual, carried out, that is, after the manner of the cogito, *the subject 'directs' itself within it towards the intentional object*. To the cogito itself belongs *an immanent 'glancing-towards' the object, a directedness* which from another side springs forth from the "Ego", which can therefore never be absent. *This glancing of the Ego towards something is in harmony with the act involved, perceptive in perception*, fanciful in fancy, approving in approval, volitional in volition, and so forth. (Husserl, [1969], p.121, my italics).

And in Thomas Aquinas Aquinas we finally read the following definition:

---

38) For the importance of Patrizzi's work cf. Cassirer [1963], p.134, although Cassirer interprets this philosopher quite differently. For Francesco Patrizzi, cf. his *Nova de Universis Philosophia*, fol.31, where he says "Cognitio igitur quid nam est sui natura ? Videtur sane, non aliud quid esse, quam convensio, et intensio cognoscentis in cognoscibile, studio veritatis adipiscendae".
39) Cf. Brentano ([1969], p.14
40) Cf. Husserl [1969], Second Section, Second Chapter, Paragraph 36 and 37 ("Intentional Experience", and "The 'directedness' of the pure Ego in the *cogito*, and the noticing that apprehends").

> *Intentio*, as the name itself sounds, means "tending towards something else"; and so both the action of moving and the movement of what is moved tend towards something (*Sum. theol.*, I-II, q.12, aa.I,5;q.I,a.2).[41]

From the Aristotelian *epistemophilia* and the Scholastic *vis cognoscitiva*, through the Renaissance's *intentio cognoscentis in cognoscibile*, up to Descartes-Eudoxus' *malady* and Husserl's *intentional directness* towards reality, the *desire for knowledge* is gradually empted of its ontological aspect and becomes a one-way tension of man towards external reality and its knowledge, without any necessary corresponding movement of reality towards man.

Let me now summarize the content of this section. I've very briefly sketched the hypothesis that one of the reasons underlying the acceptance of the AP is the interpretation of the process of knowing as a way of going towards reality and the dynamic representation of the *vis cognoscitiva* as the driving motor of this process, present in the human mind. On the basis of some interesting evidence I hypothesized that such a dynamic analogy may be at work throughout all our epistemological tradition. The idea that man has a spontaneous tendency towards external reality and its knowledge can be recognized as implicit both in the concept of an *intellectus activus*, and of that of intentionality. So I have conjectured that there might be a continuous line of development from the former to the latter. It seems very likely that also the concept of intentionality is influenced by the dynamic analogy and by the "extro-verted" interpretation of the genesis of the process of knowing. But then, as for the *vis cognoscitiva*, it would be interesting to investigate why there is this sort of "directedness" of consciousness, and especially whether "to be intentional" is a first, inborn characteristic of psychological states or rather a supervening

---

41) 'Intentio, sicut ipsum nomen sonat, significat *in aliquid tendere*; in aliquid autem tendit et actio moventis et motus mobilis'.

and/or a constrained attitude. The shield is naturally directed towards the sword but its "directedness" is to be understood as a response, induced by a previous action coming from outside. The fact that something can be identified as a "shield" if and only if it is a shield against something else, or even that something counts as a shield only if it is in a "shield-relation" in respect to something else doesn't explain why there must be a shield at all. The same could be said about the intentionality of cognitive states.

Although it would be extremely interesting to pursue the investigation much further, I must stop here. Any further remark would definitely fall beyond the already broad limits of this chapter. I shall come back to the issue in the next chapter, to add some additional specifications, yet the development of the details of the hypothesis must be left for a future work.

V.8 CONCLUSION

It will be remembered that the problem we started from was the attempt to give a clear understanding of the *prima facie* Traumatic Doubt "reality in itself may be completely different from what we take it to be" and of its possible solutions. In the first part of this work I argued that the doubt has three components, epistemological (Anti-$R_{ep.}^{D15}$), ontological ($R_{ont.}^{D18}$) and anthropological-metaphysical (AP^{D27}); that solutions of the Perpetual Check of Reason have been suggested from epistemological and from ontological perspectives; and that it may be interesting to see whether also the anthropological/metaphysical side can be a promising source of solutions. In this second part of the work, I've first given an analysis of what we may understand by the anthropological-metaphysical component, i.e. the Aristotelian Postulate. Then in this chapter I've discussed the theoretical *bedrock* on which the traditional acceptance of the AP may

lie. I've supported the objection that none of the grounds on which the AP has come to be traditionally accepted as uncontroversial really consitutes reasons so compelling as to make us accept the AP against our ordinary evidence. At this point, the fact that none of the reasons for accepting the AP is really cogent against our ordinary evidence may be felt to be still not a sufficient reason to make us withdraw our assent to the AP. It may be thought that as long as the AP remains *the only conceivable explanation* of the genesis of the process of knowing, perhaps we should try to find a proper justification for it. After all, someone may want to argue that, although it has turned out to be rather controversial, without the assumption of the AP we are left with the serious problem of explaining real phenomena like that of philosophical research. A supporter of the AP may go so far as to say that if the AP were not true it would be impossible to explain the existence of human culture. The AP may be still in need of a proper epistemological justification, but it may be the only explanation we have for the never-ending search of knowledge. As such, we should stick to it.

The answer that I'm going to articulate in the next chapter is that since the AP *seems* to apply to few men (let us call them vaguely the "philosophers") while *in fact* it renders the remaining majority of them – who do not desire knowledge for knowledge – an exception, then any alternative hypothesis should be welcome which renders the "philosophers" an exception and grounds its understanding of human nature on the majority of people. The fact that if the Aristotelian Postulate were abandoned we would be left with the problem of solving the apparent puzzle of those few cases in which man indeed *seems* to pursue knowledge for its own sake, is not a good enough reason to make us accept the AP uncritically.[42]

---

42) Methodologically this implies that sometime it is better to remain with a theoretical problem then to accept an inadequate solution of it.

CHAPTER VI

THE REINTERPRETATION OF THE PERPETUAL CHECK OF REASON

From Ignorance our Comfort flows,
the only wretched are the Wise
Matthew Prior [1692][1]

VI.1 INTRODUCTION

After the analysis of the theoretical contents of the AP and the discussion of the grounds on which it may have come to be accepted, it is now possible to turn to the original question that was at stake in this second part of the investigation: whether it is possible to give a solution of the Traumatic Doubt by means of a reinterpretation of the Perpetual Check of Reason.

Man carries on his search for knowledge largely beyond the limits both of the acquisition of knowledge essential for his survival and of mere superficial curiosity. What is the origin of the human never-ending search for knowledge ? Positing a desire of knowledge for its own sake has been commonly considered the best answer. The alleged phenomenon of *epistemophilia* would be the *ratio essendi* of the P-knowing in so far as this latter concerns intellectual knowledge-why. In the first part of this work we have seen how the assumption of the AP is responsible for the formulation of the Traumatic Doubt as one of its *three essential components.* Moreover, in the previous chapter I considered the difficulties created by any attempt to give an effective, compelling justification of the acceptance of the AP. I ended the chapter by saying that the only possible, final reason left for assuming the AP could be that

the AP is merely supposed to be *the only satisfying* answer to the question concerning the genesis of the P-knowing. This has now to be counter-argued in a positive way. The methodological principle I will follow is that we should always prefer a competing hypothesis that can (i) explain the genesis of the process of knowing, but that (ii) does not endorse the paradoxical conclusion supported by the AP, being more consistent with our anthropological evidence. The alternative perspective introduced below by the *Peirceish Postulate* can allow (i) an interpretation of the genesis of the process of knowing and of the human never-ending search for knowledge consistent with our ordinary evidence, (ii) an explanation of why *some men seem* to be real "philosophers", and finally (iii) a non-traumatic and therefore non-problematic reading of the Perpetual Check of Reason. In trying to solve the Traumatic Doubt by operating on its anthropological side, the anthropological strategy attempts an alternative answer to what is the *ratio essendi* of the genesis of the P-knowing such that, contrary to AP, it is also consistent with our ordinary evidence and at the same time it does not lead to the Perpetual Check of Reason. This is the task of this final chapter.

The chapter consists of seven more sections. Sections 2-6 make up the first stage of the chapter through which the *Peirceish Postulate* (PP) comes to be formulated. In section 2 I discuss a trivial version of the anthropological solution of the Traumatic Doubt. The failure of this trivial version will indicate the direction that an anthropological strategy should take if it must be effective. In section 3 I begin to delineate a better formulation of the anthropological strategy from the point of view of the *dynamic analogy* seen in V.6. I shall develop an alternative analogy between moving and knowing by briefly discussing first the physical concept of *inertia* and then that philosophical of *inertial conatus*. This

latter introduces Section 4, where I focus on a more philosophical elaboration of the Peirceish Postulate. In Section 5 I deepen our understanding of the Peirceish Postulate by joining the hypothesis of a mental *inertial conatus* with the conception of a *mental state of rest* in terms of *nescience*. In Section 6 I insert the PP within a "philosophically PP-favourable environment", namely a *Peirceish Epistemology*. In section 7 I put to test the value of the PP in respect to both our ordinary evidence and the TD. In Section 8 I pose six questions that constitute the theoretical task attending a future, articulated development of the hypothesis, whose value and importance I hope to have successfully advocated here.

VI.2 A TRIVIAL VERSION OF THE ANTHROPOLOGICAL STRATEGY (AS_T)

As for the epistemo/ontological strategies, we may expect that also in the case of the anthropological strategy there could be different proposals to solve the P.C.R. by working in different ways on the anthropological side of the problem. Some of them can be very interesting and fruitful. In order to expose what I consider one of the best versions of the anthropological strategy, let me begin by introducing a trivial version of the argument that the anthropological strategy may be thought, at first, to support.

Having seen that the AP is largely unjustified, someone may want to solve the TD by eliminating its anthropological component in the following way (where AS_T stands for "trivial anthropological strategy):

AS_T) one of the reason that causes the TD is the assumption of the AP; but since it is reasonable to assume that (i) men generally do not not care about knowledge of the intrinsic nature of eternal reality just for its own sake, it follows that (ii) the assumption of the AP is not justified; and the abandonment of the AP implies that (iii) the possibility that reality in itself may be completely different from what men take it to be (i.e. the TD) is not felt as a real problem by men, and hence that the TD is solved as not being a real problem for men.

AS_T is very defective as a proper solution of the TD. As far as this latter *is* an interesting problem it is also left completely untouched. AS_T is stating only that most of the time the great majority of people would not care about the TD. Unfortunately, whilst this is obvious, it adds no further insight to the debate. For AS_T cannot correctly conclude from this that *therefore* the problem represented by the TD is not a *real* problem. Although our ordinary evidence can make us suspicious about the "statistical" validity of the AP, the key role played by the AP in the mechanism of the TD cannot be argued statistically, as if the whole issue could be reduced to different answers to the question whether or not people in general care about the philosophical problem of the value of human knowledge. The mere fact that most of the people most of the time don't care about certain problems presented by mathematics, for example, doesn't prove that these problems are not *real* problems. The simplest objection coming to the mind is that, despite the ordinary evidence obtained from the common attitude of the human population, many philosophical problems are *real* problems; either in the sense that they are *real* problems even if only a restricted number of people recognized them as such, or in the sense that in any case they are *real* problems for a certain number of people, however restricted this latter may be. The answer we require is one that addresses the problem itself, not merely the *context of discovery*, to use Reichenbach's phrase. Instead of dealing with the problem AS_T merely

pretends to make it irrelevant, and this despite the fact that the problem has been already posed as important.

What AS_T can teach us is that the anthropological strategy must deal with the AP *theoretically* not just as a statistical report. The anthropological strategy must try to show not merely that from an inductive point of view the AP is untenable, but that once we have started dealing with the general question about the relation between knowledge and reality, it is philosophically possible to join an epistemological anti-realist view with a minimal ontological realism in a *non-problematic* interpretation of the intellectual task of the process of knowing and of the intellectual reasons governing its genesis. The anthropological strategy must show not that the TD is an irrelevant question because the AP is untenable, but that as a philosophical issue the TD can be solved by eliminating its problematicity, which is due to the assumption of the AP.

Although this theoretical enterprise can be carried out in various ways - for there is a continuous gradation of possible, more or less positive interpretations of the gap G occurring between ER^p and ER^n as it is produced by (Anti-$R_{ep.}^{D15}$ + $R_{ont.}^{D18}$) - we may well distinguish two extreme positions within which all the others can be supposed to range.

According to the *weakest alternative* (AS_W) the possibility of the occurrence of G, and therefore of an ontological dualism, would turn out *to be an unfortunate but inevitable corollary of the nature of human knowledge*, a consequence we must learn to live with. It will be remembered that this approach has been presented as Kant's in III.5.c. Unfortunately, AS_W is not radical enough. The point can be briefly illustrated by referring to a certain obvious feeling of regret still implied in such a position. AS_W seems to accept the idea that it would be marvellous if man could know ER^n, but that, since he

cannot, he should accommodate himself within the limits of his knowledge. In other words, AS_W still largely accepts the AP, although, with an air of resignation, it is forced to recognize that the desire for knowledge of the intrinsic nature of ER is pointless and unsatisfiable. A Kantian-like AS_W has to be understood still from the perspective of a sad and yet necessary loss of realism in terms of identity between ER^p and ER^n.

On the other hand, according to the *strongest alternative* (AS_S), the same dualist outcome could be interpreted as a *positive* result. Like AS_W, AS_S accepts the ontological dualism. Contrary to AS_W, AS_S rejects the AP more drastically, reversing our conception of what a sound form of realism should amount to. Such a "revolutionary" anthropological strategy rejects the validity of the AP since it also means to shift the interpretation of what the task of knowledge is from that of *mirroring* reality to that of *coping* with it in terms of "defence". AS_S interprets "coping" in a very strong sense, in terms of whatever procedure may be successful in preserving and protecting a fundamentally static peace of mind. As we shall see, on this basis the constitution of a dualism between ER^p and ER^n can be interpreted positively, as the proper task of the process of knowing. The human mind would cope with external reality by trying to leave it outside her *internal world*, as much as reasonably possible. The substitution of the AP with a more inertially-orientated postulate is required if the main aim of the process of knowing at an intellectual level is to be no longer identified with the discovery of the intrinsic nature of external reality, but rather with the inertial preservation of a peaceful *nescience*. The characteristics of this manoeuvre will emerge more clearly as the chapter progresses.

VI.3 THE LAW OF INERTIA AND THE ANALOGICAL-DYNAMIC INTERPRETATION
OF THE GENETIC PRINCIPLE OF THE P-KNOWING

We have already seen that one of the central assumptions in the
history of epistemology might have been the analogical conception of
knowing as a sort of spontaneous motion of HKS towards ER. From this
perspective the AP might have found a possible justification insofar
as it presents the *vis cognoscitiva* as a sort of internal motor of
this process, as the dynamic, "extro-verted" driving force that would
render human knowledge possible by activating and addressing the
cognitive processes. The first propaedeutic step towards the
development of AS_S consists in a reworking of this analogical
reasoning. We could follow the introduction of the concept of *inertia*
in the dynamics of bodies in order to improve our understanding of
the "dynamics" of knowing. In the same way as the Aristotelian
Physics - in terms of natural places, spontaneous and violent
movements and of motion as a process - has been replaced by a
Newtonian Physics of inertial states, so the *dynamic* image of the
principle of the genesis of the P-knowing (*vis cognoscitiva*) could be
replaced by an *inertial* conception of the same (*inertial conatus*).

Since similar analogical reasonings are very often misleading,
especially in philosophy, we need to be generally prudent about their
adoption. *Supporting* a transformation in the conception of the
process of knowing and of its genesis simply on an analogical basis
may be judged an erroneous procedure. Methodologically, it is highly
questionable to proceed by describing an analogy between A and B,
then drawing some further conclusions in respect to B, and finally to
come back to A in order to apply the same conclusions in the same way
within a completely different context. However, such a concern for
the use of the *analogy-as-justification* is misplaced in respect to
the use of the *analogy-as-heuristic device* that I'm proposing in this

context.[2] All I'm suggesting is that if the analogy knowing/moving has any value, then this lies in its ability to provoke the thought that what has happened in physics could also happen in the "dynamics" of knowing. The shift from a natural *impetus* to a *static force* may lead us to investigate the possibility of a similar shift in our understanding of the genetic principle of the P-knowing, from a *dynamic vis cognoscitiva* to an *inertial conatus*. The great advantage of employing analogies, colourful images or metaphors is that as heuristic devices can be very helpful as means of sugesting new lines of research. We only need to bear in mind that, in the present as in the next section, we are working with a mere "analogical" suggestion. This will open the way to a further, more theoretical analysis of the proposal so introduced.

In order to operate the shift in the analogical conception of the genetic principle of the P-knowing I need to touch, though as briefly as possible, on the thought of Ockam, Buridan and Newton in relation to the conceptual development of the inertial interpretation of physical motion. I will later consider this interpretation from the point of view of Spinoza, from which the thoughts of the other philosophers will appear as components of one, larger mosaic.

VI.3.a OCKHAM'S RAZOR

In V.2 I said that my policy against the *vis cognoscitiva* would have followed the economic principle implicit in Ockam's razor. Ockam was actually the first philosopher who radically criticised the Aristotelian physics of natural movements, and I believe that,

---

2) For this terminological distinction cf. Ruse [1986], pp.31-37. Ruse quotes Mill who states the point very clearly: " [...] there is no analogy, however faint, which may not be of the utmost value in suggesting experiments or observations that may lead to more positive conclusions ([1884], p.368)".

mutatis mutandis, what he says about the Aristotelian natural and spontaneous *forces* can be easily applied also to the conception of a *vis cognoscitiva.* According to Crombie [1959]:

> It has been claimed [...] that by rejecting the basic Aristotelian principle expressed by the phrase *Omne quod movetur ab alio movetur,* Ockham took the first step towards the principle of inertia which was to revolutionize physics of the 17th century. Certainly by asserting the possibility of motion under the action of *no motive power,* a possibility formally excluded by the Aristotelian principle, Ockam opened the way to the principle of inertia and to the 17th-century definition of force as that which *alters the state of rest or uniform velocity,* in other words that which produces acceleration (p.78).

It is worth reporting a passage from Ockham quoted by Crombie *(ibidem,* p.77) for it deepens our understanding of the analogy motion/knowing:

> I say therefore that which moves *(ipsum movens)* in motion of this kind, after the separation of the moving body from the original projector, is the body moved by itself *(ipsum motum secundum se)* and not by any power in it or relative to it *(virtus absoluta in eo vel respectiva),* for it is impossible to distinguish between that which does the moving and that which is moved *(movens et motum est penitus indistinctum)* [...]"*.
> Ockham's *Commentary on the Sentences,* book 2, question 26, M, quoted by Crombie
> *)[Crombie's note] Translated from the Latin text published by Anneliese Maier, *Zwei Grundprobleme der Scholastischen Naturphilosophie,* Rome, 1951, pp.157-158.

As Crombie informs us, Ockam amplifies this conception with an application of the principle of economy in the so-called *Tractatus de Successivis* edited by Boehner, asserting in part I (p.45):

> "Motion is not such a thing wholly distinct in itself from the permanent body, because it is futile to use more entities when it is possible to use fewer [...]" (Ockam, quoted by Crombie, *ibidem,* p.77).

Although Ockham presents only a *destruens* criticism, we can take him to have already laid down the possibility of managing without any metaphysical force in the explanation of motion.[3] And

---

3) I believe Ockham would not be happy with the substitution of the Aristotelian forces and tendencies with the Newtonian force of inertia as this is understood in Newton's manuscripts (see below), which to Ockham may still seem rather like an entification of a mere potentiality. The reading of Ockham's position I'm endorsing here is rather in line with Newton's *Principia.*

this position, if we rely on the analogy motion/knowing, already amounts to an elimination also of the *vis cognoscitiva* as a necessary driving motor of the process of knowing. Along the line of the analogy knowing/moving, we can expand Ockam's criticism, relative to the field of the physical conception of motion, to the understanding of the genetic principle of the P-knowing. And accordingly, we can already imagine that, together with the *virtus absoluta* or *respectiva* in physics, also the *vis cognoscitiva* could be replaced by a more inertial principle. We can begin conceiving of the genetic principle of the P-knowing in terms of an *inertial* tendency of *HKS'* mind which would persist in its state until a change, brought by an external action of ER on it, occurs.

The study of dynamics, however, and with it we may imagine the analogy between moving and knowing, did not develop immediately in this way.

VI.3.b BURIDAN'S *IMPETUS*

For, notwithstanding Ockham's radical critique of Aristotelian physics, Jean Buridan was the one who produced the most influential new dynamic theory in the 14th century[4], consisting in his theory of impetus. This was still based on the Aristotelian principle that what moves must have been moved by something else. It was still the notion of *virtus impressa* that played the central role in the explanation of persistent and accelerated motion of bodies. As he wrote[5]:

"Therefore it seems to me that we must conclude that a mover, in moving a body, impresses on it a certain impetus a certain power capable of moving this body in the direction in which the mover set it going [...]. this impetus is an enduring thing (*res naturae permanentis*), distinct from local motion,

4) Cf. still Crombie [1959], p.80.
5) *Quaestiones super Octo Libros Physicorum*, Book 8, question 12, quoted by Crombie [1959], p.81, 83.

by which the projectile is moved [...] And it is probable that this impetus is a quality designed by nature to move the body on which it is impressed [...]".

The cause must be commensurate with the effect and so Buridan believes that the mover impresses on the moved body a certain *impetus*, a motive power by which this latter continues to move until affected by the action of other independent forces. Buridan's theory of *impetus* represents the final result of the Aristotelian physics. As such, it is still far from the notion of inertia, but it deserves to be mentioned for two reasons.

On the one hand Buridan's conception of the *impetus*, together with what has been said about Ockham's polemic attack against his contemporaries, makes still more plausible the idea that the interpretation of the "dynamics" of the P-knowing has been indeed tailored for centuries on that of physical bodies, according to the idea of a spontaneous movement produced by some internal driving force. *Vis cognoscitiva, intentio, virtus absoluta* or *respectiva, virtus impressa* and *impetus* really seem to belong to the same mental framework, to a theoretical perspective that lacks precisely the concept of inertia in the interpretation of *physical dynamics*[6] and so in the analogical interpretation of the "dynamics" of the process of knowing. As long as nature has been conceived rich of intrinsic powers that make things move, provokes changes, and modify potential states into actual ones, it is not surprising that the P-knowing, once it was interpreted as a sort of motion, should also be interpreted as due to an internal motor, driving man towards the final end of omniscience.

On the other hand, Buridan's theory proves that - apart from Ockham's intuition - until the 17th century the common understanding of physical motion was grounded in Aristotle, that is until that

---

6) For the presence of a biological version of the law of inertia in Classic and Medieval thought and the problem this may raise see below 4.c.

revolutionary period which goes from Descartes', through Galilei's, to Newton's researches. We shall see in a moment that echoes of the Aristotelian physics and of Buridan's theory of impetus are recognizable even in the first of Newton's expositions of the law of inertia. The absence of a fully elaborated concept of inertia first, and then the slow appreciation of its importance within the analogy between moving and knowing later, may have contributed to the maintenance, still in modern philosophy, of the well established picture of the genesis of the process of knowing as due to a dynamic, extro-verted *vis cognoscitiva*.

VI.3.C NEWTON'S LAW OF INERTIA

The final overthrow of the Aristotelian interpretation of motion is linked with the publication of Newton's *Principia*, where the first law (or law of *inertia*) states that:

> Every body continues in its state of rest or uniformed motion in a right line, unless it is compelled to change that state by forces impressed upon it[7].

This law was subject to many reformulations, as we discover from Newton's manuscripts. It is extremely important that we take into consideration the previous versions of the law of inertia[8] because in his manuscripts we find Newton using various terms to express the force of inertia that are very significant and have important consequences for the modification of the analogy knowing/moving, modifications at which I'm aiming at in this chapter. I shall divide my observations into two groups and develop the second

---

7) 'Corpus omne perseverare in statu suo quiesciendi vel movendi uniformiter in directum, nisi quatenus illud a viribus impressis cogitur statuum suum mutare' (Newton [1972], vol.I ('Axiomata sive Leges Motus', Lex I), p.54, my italics).
8) Cf. Herivel (1965), pp.26-28 which refers to Newton's *Manuscripts*: MS.VI, Def.5 and Def. 8; MS.IXa, Def. 2, Def.12, Def.13; MS.Xb, Def.3; MS.XI (Original version), Def.5.

at length in the next section, for it finally lies within a philosophical debate of the issue.

In Newton's manuscripts we find a terminology very close to that we have already encountered in the descriptions of the dynamic/epistemophilic impulse[9]. Since Herivel [1965] has expressed this point very clearly let me quote it at length:

> A cursory examination of these [previous] definitions [of the law of inertia in Newton's manuscripts] reveals nothing of particular interest beyond the obvious identity of the various terms *vis insita, vis corporis, vis inertiae,* or *inertia* [that Newton uses indiscriminately]. Admittedly, there is the qualification of this force from *MS.Xa* onwards as a *power* by which the inertial state of rest or motion is maintained, and from *MS.Xb* onwards this power becomes a *power of resistance.* But a closer examination of Newton's description of the circumstances under which this power is exercised reveals a *remarkable transition in his view of vis insita or inertia. Up to and including MS.Xa this is the force or power by virtue of which a body maintains its inertial state of rest or motion; in vulgar parlance, the impetus of the body, as noted in Def. 13 of MS.Xa.* [my italics]. That this was Newton's actual belief is confirmed by the corresponding enunciation of the principle of inertia, each of which contains a reference to *vis insita. In MS.Xa occurs the first hint of an impending transition in his thought. There he states that the vis insita is exercised in proportion to the change in state. In MS.Xb the transition is complete. Now the vis insita is exercised only (solummodo) in changes of state. It would seem, therefore, to have been relegated to a species of potential force, having no effect as long as the state of rest or of uniform motion continued, being called into action only in changes of states.* [my italics] That this was indeed Newton's new view of the matter is proved conclusively by the absence of any reference to *vis insita* in the enunciation of the principle of inertia from *MS.Xb* onwards. In these manuscripts we therefore have before us the record of how Newton, *on reflection, freed himself from what was apparently his previous, essentially medieval belief in the necessity of some interior force or impetus to maintain an inertial state of uniform motion.* [my italics] From now on such a state of motion (or rest) was a true state in the Cartesian sense, entirely self-sufficient, and the principle of inertia a true principle, something which had to be regarded as given, a natural fact, having no explanation and requiring none. (pp.27-28, my italics, all the underlining in the text).

---

9) For more precise information, also on Newton's use of 'vis insita' in previus formulations of his law of inertia see Herivel [1965], pp.1-64 and Cohen [1971], pp.62-68.

It is exactly in the transition from the *Manuscripts* to the *Principia* that the Aristotelian qualitative and vital cosmos of spontaneous forces is definitely lost in favour of a more formalized, inertial universe. Such a transition can also represent the *locus* where a dynamic and extro-verted conception of the mental conatus is replaced by a more inertial one.

VI.4 SPINOZA'S *CONATUS* AND THE PHILOSOPHICAL INERTIAL INTERPRETATION OF THE GENETIC PRINCIPLE OF THE P-KNOWING.

Both in his *Manuscripts* and in the *Principia*, Newton uses the term conatus to describe the force or tendency - otherwise called *vis insita, vis corporis, vis inertiae,* or *inertia*[10] - that regulates every body. The difference is that in the *Manuscripts* he still uses it with the sense we have already encountered in the formulation of the Aristotelian Postulate. Within the context of a dynamic interpretation of the *vis cognoscitiva,* "conatus" is associated to the notion of a *spontaneous tendency to reach or achieve a certain state.* At this proposal it is worth noticing that the Latin term "conor", from which *conatus* derives, means also "to attempt to go" and "to exert oneself", from where my use of "extro-vert" is derived in order to define the tendency of the *vis cognoscitiva.* In the *Principia* Newton uses the verb "conor" in order to express the new concept of a *vis inertiae,* no longer a *vis motrix.* "Conatus"

---

10) MS.VI, Def. 6: *"Conatus est vis impedita sive vis quatenus resisitur"* (quoted by Herivel (1965), p.52, my italics); *De Motu,* Def.2: *"Et vim corporis seu corpori insitam [appello] qua id conatur perseverare in motu suo secundum lineam rectam"* (quoted by Cohen [1971], p.66, my italics). As it is clear from the Latin quotation of the law from the *Principia,* Newton still employs the verb-form of *conatus* (i.e. *conatur*) in the final version of the *Principia.* It is also worth noticing that Cohen [1971] makes exactly the same remarks about the possibility of translating *vis insita* or *vis insita materiae* in terms of "'naturally inborn', and hence 'innate' or even natural' as commonly used even in classical Latin" (*ibidem,* p.67) that I've made about the phusei-clause in Aristotle's dictum.

eventualy refers to a desire *for the maintenance of the status quo.*
It is the shift in Newton's use of this term that bridges the
analogical reasoning to a more philosophical understanding of the
inertial interpretation of the genetic principle of the P-knowing.
For "conatus" as a *vis inertiae* is an important technical expression
in the Spinozian system. So much that - with an eye to the
philosophical debate - its new sense may be called "post-Spinozian".
Conatus appears for the first time with a post-Spinozian sense in
Newton's *Prinicpia*, as an inertial tension to maintain a certain
state. The passage from the manuscripts to the *Principia* is precisely
the theoretical place where the shift between the two conceptions of
"conatus" occurrs. Through this shift in the conception of the mental
conatus we can try to introduce the law of inertia also into our
understanding of the "dynamics" of knowing. Still on a mere
analogical ground, the human genetic principle of the P-knowing could
become (although not necessarily, see section VI.4.c) a desire to
maintain the *status quo ante* of a certain peace of mind, a desire to
avoid any puzzling and mentally unpleasant cognitive situation. Man
would continue in a *state of intellectual nescience* if it were not
because external reality compels him to be involved in the process of
knowing, beyond the limits of knowledge essential for survival or
merely superficial curiosity. As far as the improvement of already
elaborated R-knowledge is concerned, the P-knowing would stop as soon
as the general target of an acceptable restoration of the *status quo
ante* is achieved.

Although still vague, this possible alternative to the AP has
already a *somewhat Peircean flavour.* And I will finally turn to
Peirce to provide it with an epistemological background. For the time
being, however, our interest in such a hypothesis can be reinforced
by considering Spinoza's philosophical conception of *conatus.*

VI.4.a A PHYSICAL INTERPRETATION OF SPINOZA'S *CONATUS*

It is well known that the doctrine of the *conatus*, "the very nerve of Spinoza's doctrine of action and passion"[11], plays an extremely important role in Spinoza's philosophy[12]. He states and discusses it at length in propositions VI/IX of his *Ethics*[13]:

> P.VI) Everything, in so far as it is in itself, *endeavours* [*conatur*] to persist in its own being. [...]
> P.VII) The *endeavour* [*conatus*], wherewith everything *endeavours* to persists in its own being, is nothing else but the actual essence of the thing in question. [...]
> P.VIII) The *endeavour* [*conatus*], whereby a thing *endeavours* [*conatur*] to persist in its being, involves no finite time, but an indefinite time. [...]
> P.IX) The mind, both in so far as it has clear and distinct ideas, and also in so far as it has confused ideas, *endeavours* [*conatur*] to persist in its being for an indefinite period, and of this *endeavour* [*conatus*] is conscious. [...]
> (Spinoza [1951], vol. II, pp.136-137).[14]

There are three principal ways of understanding such a notion of *conatus*. All of them are relevant to our present task.[15]

The first posible interpretation of "conatus" is by means of the closeness between it and the principle of inertia. According to this "physical interpretation", we have already seen that in Newton the *conatus* of an entity can be understood in terms of that entity's inertial tendency to maintain its present state of motion or rest

---

11) Martineau [1883], p.237.
12) Cf. for example what is said by Boscherini [1977], p.98, or by Curley [1988], chapter III.
13) These are the most classical reference of Spinoza's theory of *conatus*, although a first introduction of the theory is in *Ethics* II, Proposition XIII, Corollary to Lemma 3 and was first mentioned in the work *Principles of Descartes' Philosophy* (see below). According to Martineau [1883], p.237, note 3 the origin of the doctrine of *conatus* was first pointed out to be in *Cogitata Metaphysica*, II, 6, sub fin. by Trendelemburg's *Hist. Beitr. zur Phil.*, II, p.82.
14) "(P.VI) Unaquaeque res, quantum in se est, in suo esse perseverare *conatur*. [...] (P.VII) *Conatus*, quo unaquaeque res in suo esse perseverare conatur, nihil est praeter ipsius rei actualem essentiam. [...] (P.VIII) Conatus, quo unaquaeque res in suo esse perseverare conatur, nullum tempus finitum, sed indefinitum involvit. [...] (P.IX) Mens tam quatenus claras et distinctas, quam quatenus confusas habet ideas, conatur in suo esse perseverare indefinita quadam duratione, et huius sui conatus est conscia". (Spinoza [1913], vol.I, pp.127-128, my italics).
15) A clear understanding of the complexity and amplitude of the concept of *conatus* in Spinoza can be firstly gained by consulting the *Lexicon Spinozanum* (Boscherini [1970]). The three different senses that I point out in the text are the three main labels under which the entrances of "*conatus*" there listed can be grouped.

unchanged unless acted upon by an external force. This is the idea of conatus as "conatus ad motum".[16] Obviously, once the interpretation of the genetic principle of the P-knowing is given in terms of conatus then this latter bridges the genesis of dynamic states and that of the P-knowing on an unique basis. The "physical interpretation" of the theory of conatus, either as a dynamic or as an inertial genetic principle, is what I've supposed underlies our view of the nature of the P-knowing and of its genesis.[17] The fact that the concept of conatus has deep roots in the interpretation of the dynamics of bodies comes as no surprise and confirms once more the strict relation between interpretation of the process of knowing and that of the process of motion.

The two concepts, however, should not be simply identified.[18] Spinoza himself recognized that the conatus se movendi was only a limited interpretation of the concept of conatus and that this latter referred to something more than the law or the nature of motion.[19] The most important of the differences for us, is that the conatus of something is to be understood as a more general principle whereby everything endeavours to maintain its own being. It is only when this being is interpreted in terms of physical states of motion or rest that then the conatus becomes a mere translation of the force of inertia. Futhermore, generally speaking the notion of conatus implies a resistance, a power of opposition, almost a dialectic of

16) 'Per 'Conatum ad motum' non intellegimus aliquam cogitationem sed tantum, quod pars materiae ita est sita, et ad motum incitata, ut revera esset aliquo itura, si a nulla causa impediretur' Spinoza's *Principles of Descartes' Philosophy*, proposition III, definition III.
17) We find a similar use of 'conatus' in the description of dynamic states in Vico's *De Antiquissima Italorum Sapientia* 1.I.c3; Leibniz's *De Vera Methodo Philosophiae et Theologiae* in *Opera Philosophica*, pp.111; and finally in Hobbes' *De Corpore* c.15.a.2. Notably, this latter was very influential for the development of Spinoza's thought.
18) Cf. Lecrivain [1986], pp.46-48.
19) This in *Cogitata Metaphysica*, I, 6, where Spinoza draws an analogy between Descartes' first law of nature and the conatus of self-preservation. About the meaning of 'conatus ad motum' or 'conatus se movendi' cf. *Principia Philosophiae Cartesianae*, III, Def. 3. (Quoted by Wolfson [1934], p.201).

contraries, whereas the principle of inertia, from an Ockhamist point of view, can be considered a *conservative attitude* of things, a pure potentiality.

VI.4.b A BIOLOGICAL INTERPRETATION OF SPINOZA'S CONATUS

The very close similarity between Spinoza's concept of *conatus* and Newton's principle of inertia raises an historical question: why do we find the exposition of this latter anticipated by ten years[20] ? A simple answer is that both Spinoza's *conatus* and Newton's inertia have a common source in Descartes' pioneering work. This further insight in the history of the concept would not be relevant to the present investigation if it were not that it raises further problems for the approach I've adopted. Let me proceed gradually by first laying down the historical facts.

Descartes had introduced a very similar formulation of the principle of inertia in his *Principia Philosophiae*,[21] as a special case of a general philosophical principle mirroring the immutability of God.[22] As Herivel [1965] has definitively argued, Newton's first enunciation of the principle of inertia in MS.II Axioms 1 and 2 were

---

20) Spinoza's *Ethica Ordine Geometrico Demonstrata* was published postumous, the same year of Spinoza's death, in 1677 (cf. Spinoza [1951], vol. I, p.xxi), while Newton's *Philosophiae Naturalis Principia Mathematica* were published in 1687. Cf. again Lecrivain [1986], pp. 46-48 for a critical acceptance of the similarity from a Cartesian point of view.

21) "I.Any particular thing, in so far as it is simple and undivided, remains always to the best of its ability in the same state, nor is ever changed [from this state] unless by external causes. II. If [a body] is at rest we do not believe it is ever set in motion, unless it is impelled thereto by some [external] cause. Nor that there is any more reason if it is moved, why we should think that it would ever of its own accord, and unimpeded by anything else, interrupt this motion." Descartes [1984], pp. 177-291, Art. 37, Part II.

22) From the perspective of the Newtonian studies Herivel [1965] accepts that the most important statement of the law of inertia is that given in the *Principia Philosophiae*, published in 1644. Whereas, according to the perspective of the Spinozian studies, Lecrivain [1986], p.46 stress that Descartes had already established the law of inertia in 1633, in *The World: An Essay on Light*.

directly taken from Descartes' work.[23] As for Spinoza, in 1663 he had published a work entitled *Principia Philosophiae Cartesianae*, where we can find the same Cartesian principle discussed by Spinoza under the problem of the causes of motion and the laws of its communication.[24] This is sufficient to settle the question as far as the historical nature of the theory of *conatus* is concerned.

As I said, however, this answer leads to a further chain of philosophical questions. If the concept of an inertial principle was well known before Newton, isn't possible that it was also known to ancient or medieval philosophers ? And if it was known, why didn't they ever apply it to the analysis of the genesis of the P-knowing ? Are we sure that the inertial interpretation of the genesis of the P-knowing was not a hypothesis already attempted and perhaps dismissed by ancient philosophers as merely unfruitful ? These questions raise the suspicion that the hypothesis I've been following up to here may be wrong. Before answering these suspicions in section 4.c, we should consider a second perspective from which we can appraise Spinoza's theory of *conatus*. This perspective is "biological". This will also help to articulate the interpretative difficulty better. Although ancient philosophers had a biological understanding of the law of inertia, they never employed it to criticize the Aristotelian Postulate.

The "biological" interpretation, held e.g. by Kristeller [1984] among others, refers to the principle of *conatus* as to

> [...] nothing else but [sic] the (vital) impulse of self-preservation (*horme*) which occupies a central place in the Stoic system of ethics* (Kristeller, [1984], p.5)
> *) [Kristeller's note] *Stoicorum Veterum Fragmenta*, ed. H. von Arnim, Stuttgart, 1964, III, p.43, fr.178, p.44, fr.183.

---

23) See Herivel [1965], chapters 1 and especially 2 ("The Influence of Galileo and Descartes on Newton's Dynamics"). In chapter 3, p.54, Herivel says "It seems likely that Newton's first views on *conatus* or endeavour resulted from his study of Parts 2 and 3 of Descartes' *Principia Philosophiae*."
24) Spinoza's *Principles of Descartes' Philosophy* II, Proposition XIV.

By referring to the Stoic concept of "horme`", Kristeller is once more confirming the hypothesis followed in this chapter. For a fragment in Von Arnim [1964], II, 458, defines "horme`" as "the first movement [kinesis] of the soul towards or away from something". The instinct of self-preservation ("oikeiosis") is only a particular kind of "horme`".[25]

A very interesting reconstruction of the whole connection between the biological aspect of the principle of conatus and that of natural appetite or self-preservation has been given by Wolfson [1934].[26] As he says, at the level of biology the principle of self-preservation was well known in the antiquity. In a very schematic list we have the principle stated:

- by the Stoics: "an animal first impulse (hormen, appetitionem) [...] is to self-preservation";[27]

- by Cicero, according to whom this view is nothing more than a repetition of Peripatetic view: "Every natural organism aims at (vult) being its own preserver";[28]

and then in the middle age

- by Augustine "all things in nature wish to exist (se esse velle) or to conserve their existence (suum [...] esse conseurent)";[29]

- by Thomas Aquinas, "every natural thing aims at [appetit] self-conservation";[30]

- by Duns Scotus, "every natural being desires (appetit) with a natural desire to continue in existence";[31]

25) Cf. Pembroke [1971].
26) Cf. Woflson [1934], pp. 195-208. A large part of the information I'm giving in the text comes from this work, although this is completely extraneous to the more general framework within which they are inserted.
27) Diogenes Laertius De Vitis Dogmatibus et Apophthegmatibus Clarorum Philosophorum, VII, 85.
28) De Finibus Bonorum et Malorum, IV, 7, sect. 16.
29) De Civitate Dei, XI, 27.
30) Quaestiones Disputatae de Potentia, Quaest. V, art. I, 13.
32) Questiones in Libros Physicorum, Lib.I, Quaest. 22, No.6.

- by Dante, "everything which exists desires (*appetat*) its own existence".[32]

- by Telesius, who similarly sets forth self-preservation as that at which all things aim (*appetens*).[33]

So that it is reasonable to conclude with Wolfson that:

> At the time of Spinoza the principle of self-preservation became a commonplace of popular wisdom, so much so that in the Hebrew collection of sermons by his teacher Rabbi Saul Levi Morteira, one of the sermons begins with the statement that "Nature, mother of all created beings, has implanted in them a will and impulse to strive for their self-preservation"*
> *) [Wolfson's note] *Gibe' at Sha'ul*, XVIII.
> (Wolfson [1934], p.196.

Admittedly, there is a close similarity between Spinoza's *conatus* and the principle of self-preservation. And again there is more than one aspect of such similarity that deserves our attention. The first observation that is worth making concerns a terminological question. Still following Wolfson's interpretation, we are informed that:

> In all the quotations [given above], it will have been noticed that, self-preservation is spoken of as a sort of wish or will or desire expressed by such terms as *vult*, *velle* and *appetit*. These terms may be all traced to the Greek *horme* which is used in the passage before. But *horme*, as we shall see, can also be translated by *conatus*. (Wolfson [1934], p.196)[34]

If now we recall that Aristotle used the term *horme* as a negligent form for *orexis* and *orexis* is the noun for *oregontai*, the term occurring in Aristotle's dictum, then we may recognize a further connection, although feeble, between Spinoza's *conatus* interpreted as *horme* - that is as a self-preserving tension - and the Aristotelian fundamental striving for knowledge. In both cases the theory attempts to individuate an original force or source of actions.[35] Both authors

---

32) *De Monarchia*, I, 13 (or 15).
33) *De Rerum Naturae*, IX, 3, beginning.
34) Wolfson supports this translation by referring to Cicero's *De Natura Deorum*, II, 22, sect.58; II, 47, sect. 122; and to Hobbes' *Leviathan*, I, 6.
35) Things are made even more complicated by taking into consideration what Wolfson says about the closeness between *conatus*, *horme*, and *natural love* (*Spinoza's natuurlyke Liefde*), see *ibidem* p.197. The issue is connected with the Platonic concept of *eros*, but unfortunately it cannot be investigated further in this context.

are, so to say, working on the same point at the same level. Indeed, we shall see in a moment that a particular meaning of conatus in Spinoza is very close to the vis cognoscitiva of the AP.

Another observation I wish to make concerns the relation between the Stoic horme, above mentioned by Kristeller, and the concept of conatus. Although the former applies only to animals, while the latter to whatever exists,[36] there is a strong dynamic interpretation present also in the Stoic doctrine of horme. So the main difference between the Stoic horme and Spinoza's conatus has very much to do with the "physical" origin of the idea of conatus as an inertial force,[37] in contrast to the more "biological" understanding of the Stoic horme. To be added to our general understanding of the issue is the Stoic doctrine according to which there is also a strict connection between the concept of horme and that of apatheia, or freedom from passions. At the moment this is nothing more than a hint, but its relevance to the whole discussion of the AP will be clearer below, when I discuss the more intellectual notion of ataraxia[38] in Pyrrohnism.

The last important observation worth making in this context concerns the association generally occurring between the idea of a conatus-horme and the denial of the presence of a natural desire for self-destruction. This latter is seen as the mere counter-part of the former, and it is already stated by Cicero and Diogenes Laertius.[39]

---

36) ibidem, p.199-200.

37) This is only in part Wolfson's opinion, for he rather tends to connect this aspects with some sort of pantheism and vitalism present in Spinoza and other previous authors like Telesius and Campanella, ibidem, p.200-1.

38) The common tendency is to maintain almost an identity between the two concepts of apathia and that of ataraxia, cf. for example Dal Pra [1975] pp.74-80, that identifies apathia, ataraxia, and Zeller [1962], p.525, note 1, who identifies under one concept aphasia, akatalepsia, epoche, arrepsia, and agnosia (for this term see below) tes alethes. In this context I shall follow this common tendency, although I believe that the first state enjoyed by a mind is one of apathia ('apatheos' = 'unaffected' 'healthy', 'not suffering or having suffered' 'without experience') and only a mature mind can enjoy one of ataraxia ('calmness', 'impassiveness from something') after she has positively reacted against external reality.

39) De Finibus, III, 5, sect. 16; and De Vitis, VII, 85.

In Spinoza it has an important place in Prop. IV and V of the *Ethics*. In a metaphysical reading of the process of knowing this specification is of vital importance for understanding the mental *conatus* as a resistance against the *alienating* pressure that external reality can exercise on the mind itself. Such alienation, in terms of the Stoic *allotriosis*, would amount to nothing more than mind loosing her own nature because of the acquisition of "extraneous" characteristics.[40]

VI.4.c A MENTAL INTERPRETATION OF SPINOZA'S CONATUS

Both the physical and the biological readings of the *conatus* cast a clear light on the last possible interpretation of Spinoza's doctrine, namely the "mental" interpretation, which is also the most important for the task of developing an anti-Aristotelian Postulate. According to a certain interpretation of the *mental conatus*, the human mind would be governed by an inertial tendency to remain in a state of *nescience* as long as external reality doesn't force her into the process of knowing.[41] In order to articulate this position, I need to deal with the interpretative problem that arose above.

---

40) The issue is strictly connected with the Aristotelian-Scholastic hypothesis of isomorphism and Cusanus-Chisholm's criticism of it (cf. Chisholm [1964], (now in [1982], pp. 177-178) to which I've already referred in chap. III.

41) An interesting aspect of the issue is the strict relation between Spinoza's concept of *conatus* and Freud's concept of *libido*. As Hampshire [1956] says: 'There is an evident parallel between Freud's conception of *libido* and Spinoza's *conatus*. The importance of the parallel, which is rather more than superficial, is that both philosophers conceive emotional life as based on a universal unconscious drive or tendency to self-preservation; both maintain that any frustration of this drive must manifest itself in our conscious life as some painful disturbance.' (p.107). On the other hand, Hessing [1977] informs us that 'Freud's teacher, Franz Brentano 'was engaged in writing a treatise on psychological methods which anticipated many of Freud's latter ideas, in particular Freud's emphasis of the intentional, or meaning content of an individual's action as the central focus of psychological inquiry.' (Hessing is quoting Reeves [1976] in his 'Freud's relation with Spinoza' (p.230)). Obviously the whole issue is tied up with the development of the concept of 'intentio' I mentioned in V.7.

I said earlier that the physical interpretation of the concept of *conatus* and the necessary historical shift in the origin of the concept of inertia can raise some doubt concerning the originality and fruitfulness of the approach adopted in this chapter. The *biological* interpretation seems to reinforce such doubts. The objection may be finally put this way: if in the antiquity the idea of a *conatus* in terms of a desire for maintaining a certain state as unchanged as possible was well known - at least in its biological clothes - then why did so many philosophers speak only in terms of a vital dynamic force driving man towards knowledge ? Better, did Greek or medieval philosophers themselves ever think about investigating the possibility of an inertial interpretation of the genetic principle of the P-knowing, in terms of a mental tendency to persevere in a certain static state of mind, namely that of *nescience?* And if not, why didn't they ? There are two possible answers to these questions, only the second of which is satisfactory.

The first, rather unconvincing answer, is that ancient philosophers may have been following more a physically than a biologically analogical interpretation of the P-knowing. They may have been more interested in understanding knowing as a sort of *motion* than as a sort of *change in being.* In this case the idea of self-preservation would have not suggested that of an inertial state of mind. Rather, the metaphysical views about motion would have played the central role in presenting a lively representation of the nature of knowing. This answer is not completely satisfying for the obvious reason that e.g. in the outstanding case of Aristotle, we know that the idea of motion is after all reduced to that of physical change. Put in this way the biological version of the force of inertia *should* have suggested the possibility of a different reading

of the genetic principle of the P-knowing *via* the analogical association change-motion-knowing.

The second answer is more acceptable. According to a vaguely inertial interpretation of physical, biological or mental change we only state that a certain entity will continue in its own *activity or state of rest* unless acted upon by an external force. Note that nothing is said about the *original* state of this entity, that could be either one of activity/motion or one of rest; *in any case*, the law of inertia attests only that the entity will continue to be in that state unless something happens to it. Hence, we can perfectly imagine that even a Stoic philosopher could have reasoned thus:

i) according to the *biological law* of maintenance of a *status quo ante* by a certain entity as long as possible, everything aims to the preservation of its present state;

ii) because of such an *inertial conatus*, a mind will continue in his *activity* as long as it is not acted upon by an external cause;

iii) since the normal, undisturbed activity of a human mind, when conceived in a sort of "metaphysical *vacuum*", is that of thinking, and more particularly that of knowing;

iv) then, also in accord with an inertial interpretation of the genetic principle of the P-knowing, a human mind will continue to know and proceed towards the endless acquisition of further knowledge, unless disturbed by some external factors.

According to this reasoning, the human mind is like a piece of iron near a magnet: leave it alone and it will be *naturally (phusei)* attracted by, and move towards this latter.

The point that speaks in favour of this interpretation is that it becomes much easier to understand Albert the Great's and Thomas Aquinas' considerations about the unfortunate states of some men who indeed are not engaged in the natural search for knowledge. What they

say can be interpreted, almost literally, as the description of the sort of "mental attritions" the *vis cognoscitiva* may find in its otherwise natural and direct movement/development towards knowledge. It is exactly because many philosophers started from the idea that man is *originally* interested in the acquisition of knowledge-why that even an "inertial" interpretation can conclude that, without contingent obstacles but left to himself, man would pursue knowledge for its own sake. In others words, if we associate *knowing with motion* and *nescience with rest* then, even supposing a biological, *ante litteram* inertial reading of the genetic principle of the P-knowing, this would have been grounded on the idea of a *perseverance in motion*, i.e. in *knowing*, not in rest, i.e. in *nescience*. This is actually Spinoza's position.

Spinoza claims that:

i) the *conatus* of something is not a different thing from that something (this in line with Ockham's razor) but is rather to be identified with the essence of that something (*Ethics* III, P.VII);

ii) the concept of *conatus* applies to the mind as well as to the body (*Ethics* P.IX);

iii) "When related to the mind alone, the *conatus* is called will (*voluntas*), but when it is related at the same time both to the mind and to the body is called appetite (*appetitus*)" (cf. Wolfson [1934], p.203; *Ethics* P.IX, Note);

iv) when the *appetitus* is conscious then the *conatus* is called desire (*cupiditas*) (*Ethics* P.IX, note); and

v) since mind's highest good is the knowledge of God (*Ethics*, IV, P.28); therefore

vi) "the mind, in so far as it reasons [i.e. it follows its natural activity] *desires* nothing beyond understanding [in our terminology intellectual knowledge-why of the intrinsic nature of reality], and

judges nothing to be useful for itself, save such things as conduce to understanding" (*Ethics* IV, P.27); so that in conclusion

vii) the highest aspiration of mind's natural cognitive activity is the fulfilment of its desire for knowing. Mind has a *cupiditas cognoscendi* and this is fully satisfied only when it reaches an intuitive knowledge of God, the last Being on whom the existence of all the other beings depend.

The fact that even Spinoza, the philosopher of the *conatus* as an inertial force, endorses a version of the *vis cognoscitiva* shows that an inertial interpretation of the genetic principle of the P-knowing is not strong enough to make us avoid the acceptance of the AP. We also need to assume that the "mental *inertia*", as the genetic principle of the P-knowing, is a conservative tendency exercised on a cognitive state of "mental *rest*", that is a tendency to maintain a state of *nescience*. The basic idea is that if man were left alone, deprived of any external compulsory force, he would immediately stop inquiring just for the sake of knowledge in itself. Only the conjunction of an *inertial* interpretation of the mental effort with a *static* interpretation of the initial state of mind can make possible a reading of the genesis of the P-knowing substantially different to that endorsed by the AP.

The inversion of perspective that we need is very radical. Within the general picture just given, man begins to be portrayed as a knowing subject who has a fundamental *conatus*, i.e. a mental property, tendency or attitude, to persevere in his own state of intellectual *nescience*. A first, more specific formulation of this hypothesis can be tailored on D_{27}. For reasons that will be evident in section 7 I shall label this postulate the *Peirceish Postulate* (the PP):

D_{29}) the Peirceish Postulate (the PP) holds that: "man has a spontaneous, inborn and inertial, *mental conatus* that makes him persevere in his own state of intellectual *nescience*, unless he is compelled to change that state of mental rest by some external forces impressed upon his mind".

The PP is *Peirceish* in the same way as the AP is *Aristotelian*. That is to say that the PP is not to be taken as a scholarly interpretation of Peirce's thought, but as somehow retraceable to it. This point will be made more precise in section 7. A second remark concerns the use of "mind". Being a postulate on the nature of *mental states* I believe this reference is not problematic. By using "mind" in D_{29} I don't mean to endorse any kind of position about the ontological state of this latter.

The next two sections are dedicated to the improvement of our understanding of D_{29}. By means of some considerations about Aristotle, Locke and Ancient Pyrronhism we shall leave behind the analogy with physical motion and enter into the discussion of the epistemological features of the anti-Aristotelian Postulate.

VI.5 THREE PHILOSOPHICAL INDICATIONS FOR A STATIC AND INERTIAL INTERPRETATION OF THE GENETIC PRINCIPLE OF THE P-KNOWING.

Let me summarize the main results we have achieved up to here. I started by arguing that if an anthropological strategy against the Perpetual Check of Reason has to be really effective it must be developed by anteposing a proper alternative to the AP at the theoretical level. It cannot amount to a mere statistical refusal of the whole problem *tout court* (AS_T). I then suggested that we could start elaborating the anti-Aristotelian Postulate by approaching the anthropological component of the TD from the analogical side,

following the hypothesis that since Aristotelian Physics has been replaced by Newtonian Physics we could consequently consider the replacement the *vis cognoscitiva* by a more inertial principle. This proposal has led us to consider some aspects of the development of the concept of inertia first in the physical and then in the philosophical field. The outcome of these considerations has been that in order to recommend an anti-Aristotelian Postulate it is necessary but not sufficient to endorse an *inertial* view of the genetic principle of the P-knowing. To this it must also be added an understanding of the nature of the human mind as naturally tending to a state of *rest*, intending this later as a state of cognitive inactivity or *nescience*. This is probably the most that could be heuristically gained from the analogy knowing/moving. Hopefully, we are now on the right track to develop a sound anti-Aristotelian Postulate, although we are still left with the task of finding a philosophical basis for it. In this respect, as the label "Peirceish Postulate" explicitly states, the final manoeuvre will consist in referring to Peirce's epistemology in order to provide a "friendly environment" to the more detailed description of the PP. Yet, before this I shall consider some interesting indications that can be derived from Aristotle, Locke and Ancient Pyrronhism. The remarks on Aristotle and Locke will help us in understanding more deeply what is involved in an *inertial description* of the genetic principle of the P-knowing. Ancient Pyrronhism will help us in understanding how it is possible that such an inertial description could also be anchored to a *static vision* of man's nature in respect to knowledge, that is to a vision of man being happy and ethically justified while remaining in a state of *nescience*. Needless to say, once again I'm looking for *suggestions*, not for scholarly interpretations.

VI.5.a THE INERTIAL DESCRIPTION OF THE HUMAN MIND: ARISTOTLE

At first sight it may seem strange to refer once more to Aristotle in order to obtain some additional indications for a better understanding of an inertial, anti-Aristotelian Postulate. But, apart from some terminological contrasts, this procedure is not really problematic. We find in Aristotle a means of shedding light on the PP, I do not suggest that he would support it. Furthermore, this fact clarifies what I had in mind when I said that the AP is not Aristotelian in a scholarly way. In the same way, for example, Ockam appealed to the Aristotelian text "There is no such thing as motion over and above things" (*Met.* 200^b 34) in order to support his anti-Aristotelian physics. Aristotle merely meant that there is no special category of "motion" over and above those ten discussed in the *Categories*, but by this quotation Ockham wanted to deny that motion is a distinct reality over and above the body in motion.[42] Likewise, I'm going to refer to another passage of the *Metaphysics* to see how it can be combined both with the AP and with the PP.

Just a few pages after the famous *incipit*, we find Aristotle saying:

> For it is owing to their *wonder* that men both now begin and at first began to philosophize; they *wondered* originally at the obvious difficulties, then advanced little by little and stated difficulties about the greater matters [...]. And a *man who is puzzled and wonders thinks himself nescient [agnoein]* [...] *therefore since they philosophized in order to escape from nescience [i.e. a state of agnoian],* evidently they were pursuing science in order to know and not for any utilitarian end. And this is confirmed by the facts; for it was when almost all the necessities of life and the things that make for comfort and recreation had been secured, that such knowledge began to be sought. Evidently then we do not seek it for the sake of any other advantage [...]. (*Metaphysics*, I, 982^b, 10-25, my italics).

Ross' translation, modifying the verb into an adjective, has "ignorant" and then "ignorance" for the Greek "agnoein" and

---

42) Cf. Weisheipl, [1982], p.530-1.

"agnosian". I've used "nescient/nescience". The Greek terminology is not so clear cut as Ross'. As a noun, "agnoia" can simply mean "absence of knowledge", "want or lack of knowledge", and as a verb, "agnoein" can simply mean "not to perceive or recognize", "to fail to understand", "to make a false step". Both as a noun and as a verb, and in its practical as well as in its theoretical meanings, "agnoia" does not necessarily carry with it the negative specification of the state so described, that, on the contrary, is nowadays implicit in "ignorance". Ross' couple of terms has a strong evaluative sense. When a person is *negatively* described as *ignorant* in respect to a certain subject this is because she *should not ignore*, but should know about that certain subject. The distinction is clearly drawn in scholastic philosophy, where *nescience* is defined as "simple negation or absence of knowledge" (*simplex negatio seu absentia scientiae*) while *ignorance* is defined as "privation of knowledge" (*privatio scientiae*).[43] An indirect consequence of translating "agnoia" as "nescience" is that "sophia" could then be translated as "sapience" better than as "wisdom", as it is normally done.[44] When someone doesn't have *sapience* he is *not-sapient* i.e. is *nescient* (or *insipient*), not *ignorant*. Accordingly, Socrates' famous statement is to be considered a case of *nescience* not one of *ignorance*.[45] Although I cannot deny that, by means of "agnoia", Aristotle may have wanted

43) Cf. *Enciclopedia Filosofica*, vol.4, p.988, which refers to Thomas Aquinas' *Summa Theologica*, I-II, q.76, a.2.
44) 'Sapience' maintains a cognitive sense that is totally lost in 'wisdom', but which is present in the Greek use of *sophia*, as the end of human searching, cf. *Met.* 981-982 and Ross [1958], p. 115. The use of 'sapience' instead of 'wisdom' is supported by the Latin translation, cf Thomas Aquinas' *Summa Theologica*, Lectio III, where he says 'philosophia vel sapientia', although for philosophical reasons he also uses 'ignorantia' to translate 'agnosia' cf. his *Commentaria*, Liber I, Lectio III. The use of 'wisdom', on the other hand, is well established also because of the English translation of the Bible, where *sophia* or *sapientia* are translated by means of 'wisdom' (see also the use of 'wise' in the quotation at the beginning of this chapter).
45) Cf. for example Lalande [1962], p.33. We should be careful in speaking of 'agnosia' as interchangeable with 'nescience', because the former has also an important meaning in Psychoanalysis and in the psychology of perception (cf. Gregory [1987], p. 19).

to convey a negative impression of such a state of want of knowledge, we will see that in this context it is better to adopt a more neutral translation.

Turning to its philosophical significance, the passage is *apparently* introducing an interpretation of the first principle governing the origin of the process of knowing as differing somewhat from the AP. At first, we may casually believe that Aristotle is stating that man is pushed towards knowledge by a negative feeling of puzzlement, an unstable and painful mental state of uneasiness due to his *nescience*. Accordingly, we may also believe that Aristotle would then recognize both an end for the process of knowing, vz. that of solving or putting at rest such a feeling, and the *homeostatic*[46] nature of the process. That is to say that, as soon as the mental state of puzzlement reaches a resolution, no matter how, then the process of knowing would proceed no further, and man would avoid deepening his epistemic relation with external reality any further. Notwithstanding the appearances, however, this is not what Aristotle has in mind. For clearly he still maintains the idea of "knowledge only for the sake of knowledge" ("pursuing science in order to know and not for any utilitarian end") and that of the process of pursuing knowledge as a never-ending enterprise. But then, what does he mean when he says that "it is owing to their wonder that men both now begin and at first began to philosophize" ? In that passage of the *Metaphysics*, only partially quoted above, Aristotle is attempting to cope with at least two tasks.[47] First, he is presenting a solution of

---

46) A homeostatic model is "in social psychology, the assumption that all people are motivated by the need to maintain or restore their optimal level of environmental, interpersonal,and psychological stimulation. Insufficient or eccessive stimulation automatically causes tension and sets in motion the motive and usually the behaviour required to achieve equilibrium" (Goldenson [1984], p.346). For a very interesting introduction to the concept of homeostasis cf. also Stagner in Wolman [1977], pp.395-400. Bernard [1977], p.63 and Cook [1986], p.194 speak about Spinoza's concept of *conatus* in terms of homeostatic model.
47) For a more scholarly reading of the first few pages of the *Metaphysics* cf. the outstanding work of Mondolfo [1958], chap.2, who also refers to Jaeger [1923] (English

the methodological impasse, formulated by Plato in the *Meno*, that the search for knowledge is thwarted by an impossibility; the impossibility that we cannot search for something without previously know that something. Aristotle's answer is that we just build up knowledge on previous foundations, and therefore that the whole scientific enterprise grows out of previous errors, and has no proper end. The second task is an explanation of the genesis of the process of knowing from the point of view of the individual. In this respect what Aristotle really says is not that knowledge is pursued as long as there is a mentally painful phenomenon of *agnoia* (*nescience*), but rather that it is the very intellectual *consciousness of being nescient* that drives a man towards the search for knowledge. The "therefore" clause is to be referred to "thinks himself", not to "is puzzled and wonders". Hence, Aristotle's reasoning can be summarized:

i) the fulfilment of man's potential nature is reached when man is in a state of knowledge; for this reason

ii) man desires to know; but then

iii) man wonders because he wants to know; and so

iv) he tries to satisfy his desire for knowledge by investigating external reality and by asking whether he knows something, and if so what is it that he knows;

v) upon realizing his state of want concerning knowledge, man will then pursue knowledge until reaching the state of full knowledge, and this only because of the desire for knowledge for its own sake;

vi) since human knowledge can always been improved, man's search for knowledge in virtually a never-ending process.[48]

---

tr.[1960]) for the interpretation of the Aristotelian methodology as endorsing a vision of science as an endless investigation always *in fieri*.
48) At this proposal, I find Lear's interpretation ("We cannot remain content - we are literally discontented - until we have an explanation as to why the heavens are as they are. This discontent is of a piece with the desire to know: it propels [sic] us toward exploration and the formation of explanations." [1988] p.3) a bit too "Peircean".

Aristotle is not contradicting his previous dictum, he is simply making it more plain. The process of knowing starts because the actualization of man's potential nature, his intellectual nature, is in knowledge. For this reason man desires knowledge for its own sake. That he desires it because he doesn't have it, for if he had it he wouldn't be searching for it, is only a *background negative condition*, as Putnam might say,[49] not the real effective cause of his quest for knowledge. For Aristotle, the explanatory circle between the property of knowledge being desiderable, the actual desire of knowledge and the absence of knowledge as the absence of something that is desiderable and desired, can be synthesized as following:

(i) knowledge is a *desideratum* in itself,

(ii) S desires knowledge because of (i). This is the efficient reason why S desires knowledge; and

(iii) S desires knowledge because he does not possess it, i.e. because knowledge is still desiderable. This is the negative background reason why S desires knowledge. But then, the state of wonder and puzzlement that man feels in respect to the absence of knowledge is to be referred to the desire for something that is not already possessed, so that:

(iv) "uneasiness" is simply a way of describing (iii).

By introducing the clause "*in order to escape from nescience*" (i.e. [iii]) Aristotle is merely giving a secondary, negative reason for the origin of the search of knowledge. No matter how urgent this negative uneasiness may be, it is not the principal reason why man searches for intellectual knowledge. This is clear from what Aristotle says about the "purity" of such an interest ("evidently then we do not seek it for the sake of any other advantage"). To escape a state of uneasiness, inherent to that of *agnoia*, is not the

---

49) Putnam [1987], p.97.

real purpose of the genesis of the process of knowing. Or at most, it could be only in the sense that the state of agnoia is interpreted as a frustration of the desire to know. For Aristotle it is the actualization of human nature in the state of perfect knowledge, and therefore the desire to fulfil the natural epistemophilic impulse towards such an actualization, that really drives man towards the acquisition of intellectual knowledge.[50]

Although Aristotle seems to go very close to an inertial interpretation of the genetic principle of the P-knowing, he still subordinates it to his metaphysics of potentiality and actualization.

VI.5.b THE INERTIAL DESCRIPTION OF THE HUMAN MIND: LOCKE

Although still working along Aristotelian lines, Locke presents us with a slightly different picture. In the Essay the phenomenon of uneasiness plays a fundamental role in the determination of the will, anticipating, in some aspects, Peirce's theory of doubt and belief. Let me first paraphrase what Locke says about this point in the Essay.

The mind determines the will towards action but the will should not be confused with the desire. Rather, the will is nothing but a power in the mind to direct the operative faculties of man to motion or rest, as far as they depend on such direction. [Essay, book II. chap.XXI, par.29] As a power, it is an active capacity of making a change in a certain physical or mental state [ibidem, par.1/2]. In turn, it is wrong to believe that it is some desiderable good that

---

50) The same comments are valid for Albert the Great's and Thomas Aquinas' interpretations of Aristotle. It is interesting to note that where we lack a metaphysics of potentiality and act, like in Plato, the process of hypostatization of the vis cognoscitiva is more accentuated, cf. Plato's characterization of the daimon who is "never in want and never in wealth; and further, he is a mean between ignorance and knowledge" (Symposium, 203e).

determines the will to action [*ibidem*, par.31]. For what moves the mind, in every particular instance, to determine its general power to will towards this or that particular state of motion or rest is a sense of uneasiness [*ibidem*, par.29]. This "uneasiness" we can approximate "desire", from which it is scarcely distinguishable. Such "desire" is an "uneasiness" of the mind for want of some absent good. [*ibidem*, par.31]. Even better, Locke says, we may define desire a particular state of uneasiness [*ibidem*, par.32]. Among the states of uneasiness we may count all that disquiet the mind. [*ibidem*, par.31]. So that when a man is perfectly content with the state he is in, that is when he is perfectly at ease, then the only determination of will which is left is to continue in that state. [*ibidem*, par.34]. The motive for continuing in the same state or action is only the present satisfaction in it; while the motive to change is always a feeling of uneasiness. [*ibidem*, par.29].[51]

Accordingly, the scheme I've given above for the Aristotelian view, in Locke becomes:

a) S desires knowledge;

b) knowledge is a *desideratum* because of (a). This is the efficient reason why knowledge is a desideratum; and

c) knowledge is desired because S does not possesses it, i.e. because knowledge is still desiderable. This is the negative reason why knowledge is a desideratum. But then, for Locke, the state of wonder and puzzlement that man feels in respect to the absence of knowledge is the first origin of the search for knowledge, so that:

d) uneasiness is a way of describing both the positive cause (a) and the negative cause (c) for desiring knowledge.

Locke is not so clear about this double component of the state of uneasiness because he wants both to identify desire and uneasiness

---

51) For the relation between Locke and Newton cf. Gibson [1960], pp.250-3.

straight away and yet to render the state of uneasiness a more basic

motive for action. However, because of the shift of the

"Aristotelian" logical order between S' actual desire of knowledge

and knowledge being desired, Locke is finally able to describe the

desire for knowledge as an option:

> There is no Body, I think, so senseless as to deny, that there
> is pleasure in Knowledge: And for the pleasures in Senses,
> they have too many followers to let it be question'd whether
> Men are taken with them or not [here Locke is drawing the same
> distinction I've made in V.3.a between desire for knowledge
> and a sort of Epicurean edonism]. Now let one Man place his
> satisfaction in sensual Pleasures, another in the delight of
> Knowledge: Though each of them cannot but confess, there is
> great Pleasure in what the other pursues; yet neither of them
> making the other's delight a part of his happiness, their
> desires are not moved, but each is satisfied without what the
> other enjoys, and so his will is not determined to the pursuit
> of it. [book II, chap. XXI, par. 43] [...].

In endorsing such a position, Locke goes closer to Plato than

to Aristotle. For Plato said:

> No god is a philosopher or a seeker after wisdom, for he is
> wise already; nor does any man who is wise seek after wisdom.
> Neither do the ignorant seek after wisdom; for herein is the
> evil of ignorance, that he who is neither a man of honour nor
> wise is nevertheless satisfied with himself: there is no
> desire when there is no feeling of want. (Symposium, 204a).

Note, however, that what Locke is really accepting is just the

reasoning that in order to pursue something, the recognition of that

something as worth of being pursued is not sufficient. In addition

what is required is a fundamental unease together with a need to calm

that unease. From a mere descriptive point of view, there is nothing

surprising about the fact that someone may, for example, value the

search for knowledge while not in fact participating themselves in

that search. What we are presented with is the anti-intellectualist

idea that unless man feels mentally uncomfortable in his state of

nescience he will persist in that state. Unfortunately, Locke doesn't

go any further. On the contrary, far from being tolerant with man's

normal appreciation of his state of nescience, Locke still considers

the desire for the acquisition of intellectual knowledge the precise

duty of any man who can afford to study:

> How Men, whose plentiful Fortunes allow them leisure to
> improve their Understandings, can satisfy themselves with a
> lazy Ignorance [our nescience], I cannot tell: But methinks
> they have a low Opinion of their Souls, who lay out of their
> Incomes in Provisions for the Body, and employ none of it to
> procure the Means and Helps of Knowledge; who take great care
> to appear always in a neat and splendid outside, and would
> think themselves miserable in coarse Cloths, or a patched
> Coat, and yet contentedly suffer their Minds to appear abroad
> in a pie-bald Livery of coarse Patches, and borrowed Shreds,
> such as it has pleased Chance, or their Country-Taylor, (I
> mean the common Opinion of those they have conversed with,) to
> cloath them in. [Essay, book IV, chap. XX, par.6).

Certainly, man persists in his mental state of *nescience* as long as

he doesn't feel any uneasiness in it, but *on an ethical ground*, man

ought to be ashamed of feeling comfortable in a state of nescience.

Locke recognizes that the search for knowledge may be not motivated

enough by man's intellectual understanding of what is good for him,

but once also man's intellectual "sensibility" has failed in making

him feel uneasy in respect to his *nescience*, then the search of

knowledge is linked to the *prescription* implicit in the Aristotelian

Postulate. If the majority of men do not consider knowledge a

desideratum, yet they should still consider it a *desiderandum*. There

is no mention of any external pressure on the human mind that forces

it to acquire knowledge, nor of any sort of P-knowing as a reaction

against such a pressure.

VI.5.c THE STATIC VISION OF THE HUMAN MIND: ANCIENT SCEPTICISM[52]

The conclusion is that man undertakes a task only when he feels

uneasy in a certain state, but that in the case of knowing, man ought

to pursue intellectual knowledge even if he does not feel uneasy

---

52) I own much of my understanding of some epistemological issues in ancient
philosophy to Burnyeat [1978], [1980], and [1982].

about his state of nescience. If we wonder about what justification there can be for this prescription, we need to refer to the AP.. A man involved in the activity of knowing is a better man than one who lives happy in his nescience. So in Locke the "invitation" to follow a more "philosophical" life is still based on the Aristotelian picture. The time has come now to consider a different vision of the human nature such that it does not imply the former *ethical prescription*. Could man be "ethically" justified in enjoying the relaxation peace of mind, being unconcerned with or uninterested in pursuing knowledge for its own sake ?

Ancient scepticism is certainly the main source for a positive answer to this question. Here it is not the case of arguing in favour of a neat separation between ancient and modern scepticism,[53] and for the sake of simplicity I will refer to the former as to Pyrronhism.

Pyrronhism, as with all philosophical Hellenistic doctrines, was chiefly a practical doctrine of life. The principal aim of philosophizing was to establish what the correct attitude of man towards the world should be.[54] Pyrronhism finds its particular solution in the sceptical alternative of withholding epistemic beliefs about external reality. Such a strategy consisted in bringing into conflict differing opinions, concluding that they had equal strength (*isostheneia*) and therefore that they were undecidable,

---

53) For a distinction between ancient and post-Cartesian scepticism see the very interesting article by Burnyeat [1982]. The hypothesis could be advanced that the AP, which was rejected by ancient sceptics, after having had a brilliant development in the Christian philosophy of the Middle Age, didn't come again under the attack of the Cartesian/Humean scepticism because this latter was no longer a way of approaching life (as Pyrronhism was), but much more a methodological instrument. I believe the hypothesis is justified by what Burnyeat [1980], and by Stroud [1984], especially the first chapter, said and by the fact that in Montaigne's scepticism, which is a way of life, there is still a taste of adversion towards the intellectualism of the AP. The hypothesis is also consistent with the fact that, in order to have the Cartesian, epistemological shift the sceptical challenge had to be taken seriously on the methodological side, but completely disregarded on the anthropological side.
54) Cf. for an introductory survey Sedley [1980], pp.1-17.

hence in the suspension of judgment (*epoche*), all this in order *to be able to gain* a final state of mental tranquillity (*ataraxia*).[55]

Since the Pyrronhist concept of *ataraxia* is the final element necessary for a better formulation of the Peirceish Postulate, let me now interpret it with an eye to the concept of a static *conatus* discussed above in relation to Spinoza, and to the line of thought I've been following in discussing Aristotle's and Locke's theory of uneasiness.

Spinoza tells us that the mind has an original *tendency to persevere in its state*, whatever this may be, as long as it is not disturbed by some external factor. *Aristotle* plays with the idea that *it may not be knowledge as a desiderandum* that moves the mind but actually some sort of uneasiness. *Locke* advances a bit further admitting that, although man does not feel uneasy in his original state of *nescience*, yet *the search for knowledge is man's rational/ethical duty*. The Pyrronhist can now add a further connotation to the whole picture. For he suggests that *knowledge and the desire for knowledge*, far from being a solution, *may even be the cause for the loss of ataraxia*. The Pyrronhist theory is not so straightforward, but it can be reasonably understood as reversing the relation between uneasiness and acquisition of knowledge. Not only does man feel uneasy because he is still trying to pursue a final knowledge of the real essence of the world that in fact cannot be acquired - that is, not only is uneasiness the outcome of such a desire, or better, as Spinoza would say, is it that desire itself - but the actual possession of knowledge could be the source of a deep

---

55) As Burnyeat writes: "The arguments bring about *epoche*, suspension of judgement and belief, and this, it seems, effects a fundamental change in the character of man's thinking and thereby in his practical life. Henceforth he lives *adoxastos*, without belief, enjoying, in consequence, that tranquillity of mind (*ataraxia*, freedom from disturbance), which is the sceptic spelling of happiness (*eudaimonia*) [...]" ([1980], p.25). In the text I have avoided all the references to the proper *loci* of the Pyrronhist theory that can be obtained from Burnyeat's article.

uneasiness. The more we know or we believe to know, according to the Pyrrohnist, the more we are stressed. The Pyrrohnist would agree with Descartes' Epistemon that the desire for knowledge is an "illness" or an "universal malady" which grows with learning (cf. IV.5). If we could give up knowledge altogether we would have reached that state of mind that is ready to receive the gift of ataraxia.[56] Stretching the Pyrrhonist thought to its extreme, we may say that giving up the intellectual enterprise of the search for knowledge *restores the previous ataraxia* that such desire for knowledge had destroyed. By radically accepting the aim of "peace of mind at any cost" as the central pole around which all the other prescriptions should turn, the Pyrrohnist justifies the abandonment of any intellectual enterprise. Never again, in the history of philosophy, will knowledge be so depreciated, Montaigne belonging to the same stream of thought. Man reaches the fulfilment of his nature only when he obtains a state of mental tranquillity: if knowledge, as the Pyrrohnist mainly thought, is an obstacle to this target then knowledge, and the desire for it, must be eliminated. The most natural and basic tendency of the human mind is towards a physical and mental "well-being", not towards the actualization of intellectual potentialities. In so far as the mental "well-being" is concerned, peace of mind is all man requires in his life. This is obtainable as long as the mind is not troubled by epistemological doubts and uncertainties. The Pyrrohnist recognizes such a need and elaborates a solution in terms of *epoche* and the following *ataraxia*.

At this point three interesting aspects of the Pyrrohnist doctrine are worth consideration, each with a different degree of appreciation.

---

56) For the stress on this passive reception of the mental tranquillity cf. Burnyeat [1980] and below in the text.

First, it is worth noticing that the Pyrronhist also uses the same kind of knowing/motion analogy to deal with the issue of the genesis of the P-knowing: the state of ataraxia is explicitly understood in terms of the dynamic analogy. Ataraxia is a *katastematic* pleasure, literally a pleasure *not-in-movement* (i.e not *kinematic*) but such that it coincides with the soul *being at rest*.[57]

The second aspect concerns the vision of man as happy and completely "human" in his state of agnosia or nescience.[58] For the first time since beginning this investigation we have that, if the maintenance of a state of agnosia were possible, a man without knowledge would probably enjoy a better mental life than that of one who still pursues, or even has some knowledge. The point, as we shall see in due course, is extremely important for the articulation of the PP.

The last comment regards the Pyrronhist fallacious conviction that man can *actually* do without intellectual knowledge, that is, can actually live a happy life relying only on beliefs but not on epistemic beliefs. This point has been well analyzed by Burnyeat [1980], and can be basically anchored to the Humean accusation contained in the Enquiry:[59] the Pyrronhist cannot in fact live his scepticism. The question more relevant to the present context is that it is rather obscure why the procedure of presenting opposing arguments, of producing confusion in the mind of the listener, the whole process of putting his epistemic beliefs in mutual contrast, should end by inducing him into a state of epoche and then of tranquillity instead of acute anxiety.[60] It is very indicative that

---

57) Cf. what Diogenes Laertius says about Epicurus in his *Lives of Philosophers*, X, 136.
58) Cf. Sidley [1984], especially p.10.
59) Cf. Hume [1975], chap. XII, 128, quoted by Burnyeat [1980], p.20. In an non-trivial sense Burnyeat agrees with Hume's criticism, cf. the conclusion of p.53. I believe that the objection I move in the text is in agreement with Burnyeat's position.
60) Burnyeat [1980], p.51.

the state of *ataraxia* is not positively or *actively* gained by the Pyrronhist, but merely *occurs* when the mind has been cleared of epistemic beliefs. The passivity of the whole process[61] is expressed by Sextus Empiricus in a famous passage:

> The Sceptic, in fact, had the same experience as that related in the story about Apelles the artist. They say that when Apelles was painting a horse, he wished to represent the horse's foam in the painting. His attempt was so unsuccessful that he gave it up and at the same time flung at the picture his sponge with which he had wiped the paints off his brush. As it stuck the picture, the sponge produced an image of hoarse's foam. So it was with the Sceptics. They were in hopes of attaining mental tranquillity, thinking that they could do this by arriving at some rational judgement which would dispel the inconsistencies involved in both appearances and thoughts. When they found this impossible, they withheld judgment. While they were in this state, they made a chance discovery. They found they were attended by mental tranquillity as surely as a body by its shadow. (Sextus Empiricus Outlines of Pyrronhism, in [1985], p.42).

Both analogies are indicative. Although Sextus Empiricus initially admits the casual nature of the connection between the feeling of uneasiness and that of ataraxia (it doesn't happen very often that by throwing a sponge at a picture we produce that perfect image of hoarse's foam that we wanted) he then concludes by describing a *necessary* link between the two, identical to that occurring between a body and its shadow. The objection to the Pyrronhist theory of ataraxia is that in fact, by merely cleaning up our minds of every judgment or epistemic beliefs, we are more likely to be assailed by a feeling of bewilderment rather than by one of tranquillity. So, although the Pyrronhist seems to be right to stress man's preference for peace of mind, in respect to the possession of knowledge, as the principal and fundamental target of human beings, he also seems to go wrong when he supports the thesis that in order to re-gain a state of original ataraxia man needs to *eliminate* knowledge itself. We may simply answer to the Pyrronhist that perhaps it would be wonderful if knowledge could be eliminated, but that

---

61) *ibidem*, p.42, especially note 38.

solution does not lie within our powers anyway. Knowledge exists already, and consequently we are not at liberty to live out the complete scepticism required in practice. Instead, the view that I will support is that the best way of attaining mental peace, the one actually followed by the human mind, is by means of the acquisition of strong, approximate beliefs or prejudices, hardly to be shaken by any counter-argument. Although a *nescient ataraxia*[62] is the regulative goal of any human mind, this has to be gained by acquiring *some kind* of knowledge. And we shall see that such an acquisition of knowledge gradually decreases the degree of nescience still defendable, until the whole process reaches a homeostatic equilibrium.

There is a counter-argument that is worth considering before turning to the next section. The sceptic may want to protest that by his proposal, he is actually praising a procedure whereby those who are already in a final state of uneasiness because of their search for knowledge may re-gain some peace of mind. The sceptic's proposal would regard only the *philosophers* (for Sextus Empiricus, the Stoics) that are involved in the search for an epistemological foundation of their beliefs. The procedure of contrasting epistemic beliefs against each other would help to re-gain some peace of mind for those who are no longer satisfied by their knowledge. The sceptic may want to say that for those who fail to be happy with their strong, common beliefs, the only alternative is to make them contrast each other

---

62) Note that by this expression I don't mean to imply any particular relation between the state of *nescience* and that of *ataraxia* (as in "green tree"). The expression "ataraxic nescience", although less happy, would express my thought equally well. The transformation of one of the two terms in an adjective is just a way of combining the two terms in one expression.

until the *secondary effect*[63] of ataraxia arises. There are at least three answers to this objection.

First of all, if the sceptical strategy turns out to concern only the small number of *philosophers*, then it looses much of its power of impact. The sceptic is forced to admit that not only are most of the people, all those who are happy with their crude beliefs, perfectly justified in holding them as strongly as possible, but also that all these people have to be left alone. By his own admission, the sceptic is not allowed to make someone else doubt, unless this someone is already uneasy about his beliefs. Scepticism would be like knowing the precise dates of death of each single man who is alive. Silence would be appreciated.

Secondly, the sceptical counter-argument takes for granted that the *philosophers* are those who can never re-gain their peace of mind in any other way than by withdrawing their epistemic beliefs. They are characterized as people whose mental capacity of doubting surpasses their desire for peace and the capacity too of feeling satisfied by simply gaining a different level of beliefs. Such a conviction is grounded on a very artificial distinction between "people" and "philosophers" that cannot be really sustained. It simply does not take into account the fact that very often philosophers are precisely those who have very strong opinions on many vital topics about which, on the other hand, "common people" would be more cautious. In this sense every philosopher is a crusader fighting his own holy war. After Nietzsche,[64] it would be difficult to maintain a vision of the philosopher as the man who devotes his

---

63) This is the terminology used by Elster [1983] and it concerns certain vicious processes like that of trying to stop thinking by thinking we should stop thinking. In this case "stop thinking" is a secondary effect and can be gained by means of some *distraction*.
64) Cf. Nietzsche [1966], "On the Prejudices of Philosophers".

life to the pure research for knowledge, without having an axe to grind.

The final and most important objection is that even if we limit the number of people concerned by the sceptical proposal only to the philosophers, the sceptic still has to show us first, that the procedure of putting the epistemic beliefs in mutual contrast is really effective, and secondly, that even if it is effective and sometimes can lead a person to acquire her desired ataraxia, it does it more easily, more quickly and more commonly than the process of searching for a belief that may convince that same person. This last objection is obviously linked to the previous one. If a philosopher is only a man with some special theoretical interests, then he will be looking for peace of mind exactly in the same way as anybody else. Experience told Hume that the sceptic cannot live his scepticism. Now experience tells us that in pursuing his peace of mind man follows the strategy of sticking to his beliefs as long and as strongly as possible, not to the sceptical procedure of putting all his epistemic beliefs into a mutual contrast in the vain hope that *ataraxia* will arise out of their *isosthenia*.

VI.5.d THE THEORETICAL INTERPRETATION OF THE PEIRCEISH POSTULATE

By means of the previous analyses we have accumulated sufficient material to produce a full articulation, and hence a further revision of the Peirceish Postulate. According to D_{29}, a first approximation of the PP would hold that: "man has a spontaneous, inborn and inertial, mental *conatus* that would make him persevere in his own state of *nescience*, unless he is compelled to change that state by some external forces impressed upon his mind". Drawing now the conclusion of the previous sections, we have that the

PP endorses the following epistemological picture: (as far as intellectual knowledge is concerned)

i) the *initial static state of a mind is one of agnosia or nescience;* such a state implies at least also a pleasant mental state of absence of uneasiness or anxiety, if not more positively, one of full tranquillity. I've called this complex state of peace of mind one of *nescient ataraxia;*

ii) resting in an quite state of *nescient ataraxia,* the mind has a *spontaneous, inborn and inertial conatus* to persist in that state, unless she is compelled to change that state by *some external force* impressed upon her;[65]

iii) if, for some reasons, an external pressure forces the mind into an unnatural state of uneasiness, the mind activates the process of knowing in order to restore as soon, and as much as possible of its original state. This process is carried on in the most effective way: by pure assumption of prejudices, of unjustified beliefs or of scientific hypotheses. The "secretion" of further R-knowledge is a "reaction" to the unbalance produced by a state of uneasiness, and its aim is the restoration of a state of mental peace at a higher level of homeostatic equilibrium between pressure and correspondent epistemic answer. When the equilibrium is restored the mind stops being involved in the process of knowing. This latter is reactivated

---

65) For a discussion of the Spinozian concept of *conatus* as connected with that of "peace of mind" ("*acquiescientia animi*" or "*acquescientia in se ipso*") cf. Hampshire [1956], chap. 4; and Hallett [1957], pp.103-105. From the strict point of view of epistemology, the idea that the final target of mind is that of conceiving reality from the point of view of eternity ("*sub specie aeternitatis*") and therefore of reducing the mere contingent to its dependence on the necessary and absolute is somewhat echoed in Dewey. This latter argues against any Epistemology that assumes the possibility of having a final approach to problems concerning human knowledge from the perspective of "God's eye". A middle way between Spinoza and Dewey would to assume that the mind starts from her own contingent state of *nescient ataraxia,* and that once reality has forced itself in her internal world (Dewey), then the mind strives for detaching herself from the real world, and therefore for acquiring a detached vision of external reality (Spinoza).

whenever the external pressure increases, overcoming the defense the mind has already accumulated in terms of established R-knowledge.

According to the PP, human intellectual R-knowledge is a by-product of man's reaction against external reality. Like a pearl, despite its great beauty, it must to be considered the final result of a *disturbance* provoked by an external factor into the animal's life. It would be a complete misunderstanding of the nature of the "intellectual knowledge-pearl" if we were to consider it a spontaneous and happy product of the "mind-oyster".

Such an analogy may remind us of how much of the neo-Kantian tradition is still included in the *Peirceish Postulate*. Very interestingly, Vaihinger [1965] writes:

> Just as *Meleagrina margaritifera*, when a grain of sand gets beneath its shining surface, covers it over with a self-produced mass of mother-of pearl, in order to change the *insignificant* grain into a brilliant pearl, so, only still more delicately, the psyche, when *stimulated*, transforms the material of sensations which it absorbs into shining pearls of thought, into structures (p.7)

Unfortunately, Vaihinger employs only half of the explanatory power of the analogy. For he is caught half way between considering knowledge as *reaction against* an external *disturbance*, and the idea that the external input is only the *occasion* for the production of R-knowledge, while being in itself *insignificant*. This is also the reason why Vaihinger cannot escape a Kantian version of relativism. Still sharing a faith in the *vis cognoscitiva*[66] and undervaluing the nature of the external pressure suffered by the mind, Vaihinger ends by considering the production of knowledge almost like a *free mental exercise*, like an *aesthetic activity, enjoyable in itself*. As we shall see, this is not the approach assumed by the Peirceish Postulate.[67]

---

66) Cf. Vaihinger [1965], p.171 and chapter XXXVII.
67) Vaihinger was known to Peirce for his commentary on Kant's *Critique of Pure Reason*, cf. Peirce [1931-58], 5.84.

Turning to this latter, it is easy to recognize the different components of its interpretation given above. The description of the *static state of human mind* is derived from the discussion of the Pyrrohist idea of a state of *nescient ataraxia* preceding and possibly succeeding the process of knowing. The description of the *inertial conatus* is obviously derived from the discussion of Spinoza's, Aristotle's and Locke's positions on this point. The description of the *genetic principle of the process of knowing as an homeostatic principle* is due to the conjunction of the descriptions of the two previous elements. The whole picture is partially drawn on the basis of an analogy with dynamics, but it is also easy to see that when the action of mind comes to be concerned then the parallelism is more with the biological field. The three phases in which the genesis of the P-knowing is understood - (i) the static state (ii) the inertial tendency (iii) the restoration of the static state - give rise to a sort of dialectic[68] of the process of knowing according to which - and contrary to what happens if we accept the Aristotelian Postulate - the mind plays a reactive role, one of answering, and to external reality is left the role of starting the whole process. In the next section I will articulate this picture of an anti-Aristotelian Postulate and the three theses involved in it by embedding the PP in a Peirceish Epistemology.

VI.6 AS$_S$: A PEIRCEISH EPISTEMOLOGY FOR THE INERTIAL INTERPRETATION OF THE GENETIC PRINCIPLE OF THE P-KNOWING.

Peirce is the philosopher whose work is most relevant to an articulated analysis of an anti-Aristotelian hypothesis. His

---

68) It is not a proper Hegelian dialectic movement because there is not final resolution of the oppositions, but rather an appreciation of dualism.

pragmatism provides the most favourable "environment" within which the PP can be understood and developed. This is possible only because of the very particular position Peirce enjoys within the history of philosophy. On the one hand, the great majority of, if not all, the philosophers who have been interested in studying the nature of human knowledge have also been convinced, at least implicitly, of the virtues of the AP. On the other hand, those philosophers who have been more "sceptical" about the epistemophilic nature of man, have also been more interested in other philosophical issues than those epistemological, and hence are also the philosophers from whom we cannot expect very much in terms of discussion of the AP. Hobbes and Nietzsche are two good examples.[69] It follows that we can find some suggestions on the nature of an anti-Aristotelian position only in a philosopher with a strong interest for a pragmatic, realistic, almost cynical understanding of intellectual knowledge as one of the manifestation of human beings. Peirce is such a philosopher. He has the same interest that Pyrronhism had in eliminating the intellectualist picture of man as spontaneously and irresistibly driven towards knowledge (Peirce's anti-intellectualism is one thinat one with his anti-Cartesianism, see for example 5.264-5), while he doesn't share the same negative conception about the goodness of human knowledge and the possibilities of its development. It is precisely the kind of disenchanted vision of man we need to follow in order to ground the previous interpretation of the PP.

---

69) According to Sorell [1986], p.29, "[although] Human beings cannot live well without science, [...] yet science does not come naturally to human beings" (. The whole chapter, entitled "Knowledge and Power in Fallen Man" is relevant to this investigation). For Hobbes scientific knowledge has to be gained despite man nature. Yet Hobbes seems to have a positive attitude towards what he calls the "delightful appetite of knowledge". He identifies it with *curiosity* and therefore he accepts the AP (cf. Hobbes [1940], vol. III (*Leviathan*), p.44, 67, 87, 92; vol. IV (*Three Discourses*), p.50, (*Answer to Sir William Davenant's Preface before 'Gondibert'*), p.453). For Nietzsche cf. [1966], Part One, "On the Prejudices of the Philosophers".

The first three questions that need to be answered before outlining a Peirceish epistemology are: to what extent is it possible to attribute a "peirceish epistemology" to peirce himself ? Did Peirce know about the Aristotelian dictum ? And if so, what was his position in respect to it ?

If it is doubtful whether or not it is always possible to make an experiment confirm our scientific hypotheses, yet it is certainly far too easy to make a philosopher say what one wishes, and so fit him within one's own framework. Given the nature of Peirce's work, largely unpublished and left "in progress", it wouldn't be difficult to produce such an image of Peirce higly favourable to the Peircesih Postulate. Consequently, we need to provide some evidence in order to establish the legitimacy of the claim that the PP is indeed somewhat Peircean. In addressing the first question, I appeal to *Peirce's theory of doubt and belief*[70] as this is expressed by the mature Peirce in "The Fixation of Belief" (1877) (5.358-387), in "How to make our ideas clear" (1878) (5.388-410) and in "The Logic of 1873" (editorial title; 7.313-361). It is not my intention to present my hypothesis as a scholarly interpretation of Peirce's thought or as being *supported* by Peirce's authority. The label "Peirceish" states clearly enough that I employ Peirce only as a means of providing a guide-line, and to Peirce's epistemology only insofar as it provides the most favourable context for the development of the PP.

About the second question, a positive answer could be misleading. Certainly Peirce knew Aristotle very well, as this is adequately testified by his scholarly work (cf. for example 1.325;

70) Peirce revised them in 1909-10 planning to make a book out of them (for more information cf. vol.7, p.194, editorial note 1). See also the relation between curiosity and doubt in 8.270. The quotations in the text are from other works, since I presume the main contents of these articles are known to the reader. All the texts quoted are from the collection of works published by Harvard University between 1931 and 1958 (the only exception is Peirce's MS 165, see below). I've listed some of the principal aspects of Peirce's thought, those that I believe prevent us from identifying my Peirceish position with Peirce's, in Appendix II.

and 7.233-255).[71] As far as the dictum is concerned, we find it quoted in Greek and translated in English in MS 165.[72] And he must have had it in mind when he wrote 7.579. Peirce, however, did not refer to Aristotle in order to criticize him on the same basis assumed in this work. On the contrary, he quotes the *incipit* of the *Metaphysics* in connection with the pure desire for *scientific* knowledge for its own sake, a position that Peirce endorses in many places and in different times (cf. again Appendix II.ii).[73] Thus, it must be kept in mind that in the collection above mentioned *there is no explicit Peircean opposition of the AP as such.* Having specified all this, let me now turn to the outlining of a Peirceish epistemology.

Peirce combines a strong ontological realism with a pragmatic interpretation of the role of knowledge. Brute reality, facts, things, the external world oppose the mind confrontationally and the mind employs knowledge to defends itself from the *non-mind,* or from what is *dead-mind.*[74] Throughout Peirce's work we find that reality forces itself upon human mind, almost violently:

> [...] The real is that which insists upon forcing its way to recognition as something *other* than the mind's creation. [...]
> The real is active; we acknowledge it, in calling it the actual." (1.325);[75]
> A hard fact [...] is something which is there, and which I cannot think away, but I am forced to acknowledge as an object

71) Peirce thought of himself as "an Aristotelian of the scholastic wing, approaching Scotism, but going much further in the direction of scholastic realism" (5.77, footnote). As I've already said, contrary to Whitehead, Peirce was convinced that western philosophy was fundamentally Aristotelian (cf. [I.1]). As for Peirce's knowledge of this latter, note his careful translation of Aristotle's *episteme* as "comprehension of the matter" [7.249] or just "comprehension" and its justification [7.250].

72) "A Practical Treatise on Logic and Methodology", winter 1869-70, published in Peirce [1986-] vol.2, p.350 and ff.

73) On the contrary, Peirce the philosopher of science regards himself as an Aristotelian, cf. 1.618.

74) See the concepts of external dead thing, of action, passion and process, and their relation with mechanics in 1.359-61. For the partiality of this interpretation cf. the Appendix II.iii.

75) Cf. also 1.320 and 1.431.

or second beside myself, the subject or number one, and which forms material for the exercise of my will. (1.358);
We are continually bumping up against hard facts (1.324);[76]
[...] you are compelled, brutally compelled, to admit that there is such an element in the world of experience as brute force. What then is brute force, or what does it seems to be ? [...] A brute force is only a complication of binarities. It supposes not only two related objects, but that in addition to this state of things there is a second subsequent state. It further supposes two tendencies, one tending to change the first relation in one way in the second state; the other, of the other relate, tending to change the same relation in a second way. Both those changes are in some way combined, so that each tendency is to some degree followed, to some degree modified. This is what we mean by force. It is almost purely binarity. The bruteness will consist in the absence of any reason, regularity, or rule, which should take part in the action as a third mediating element. Among the inner shapes which binarity assumes are those of the doubts that are forced upon our minds. [...] If we did not struggle against doubt, we should not seek the truth. (2.84).

The border where brute fact and the mind clash against each other is the sphere of perception and experience (cf. 7.437-43):

[...] Perception represents two objects reacting upon one another [...]. That, of course, is the doctrine of Immediate Perception which is upheld by Reid and Kant, and all dualists who understand the true nature of dualism, and the denial of which led Cartesians to the utterly absurd theory of divine assistance [...] (5.56).
Experience is that determination of belief and cognition generally which the course of life has forced upon man. One may lie about it; but one cannot escape the fact that some things are forced upon his cognition. There is the element of brute force, existing whether you opine its exists or not.[...] (2.138).[77]

In the perceptual stage of knowledge[78] brute reality enters into the mind, and in having experience the mind reacts against perceptions. It is in the passage from doubt to belief that the mental uneasiness brought about by experience is fought. Although Peirce is not sure about the dynamic characterization of the opposition between reality and mind,[79] he believes that:

---

76) Cf. also 2.22.
77) Cf. also 2.139.
78) Cf. 1.335-6 and also 1.175. For Peirce's theory of perception cf. 7.615-636 and 7.642-681.
79) '[...] as far as the element of struggle is concerned, there is no difference between being an agent and being a patient. It is the result that decides; [...] The sense of shock is as much a sense of resisting as of being acted upon. So it is when anything strikes the senses. [5.46] 'I would limit it [volition] to the momentary direct dyadic consciousness of an ego and a non-ego then and there present and

The important point [is] that the sense of externality in perception consists in a sense of powerlessness before the overwhelming force of perception. Now the only way in which any force can be learned is by something like trying to oppose it. That we do something like this is shown by the shock we receive from any unexpected experience. *It is the inertia of mind, which tends to remain in the state in which it is.* [my italics] [..]. The passive and unintentional volition that gives the shock of surprise and the sense of externality [is to be classed like a] mode[s] of [...] consciousness, that is, of awareness, at once and in the same awareness, of an ego and non-ego [...] (1.334).

The HKS deals with reality by means of knowledge, on the basis

of a *reactive conservatorism*:

[...] There is active volition and passive volition, or inertia, the volition of reform and the volition of conservatorism. That shock which we experience when anything particularly unexpected forces itself upon our recognition (which has a cognitive utility as being a call for explanation of the presentiment), is simply the sense of the volitional inertia of expectation, which strikes a blow like a water-hammer when it is checked; and the force of this blow, if one could measure it, would be the measure of the energy of the conservative volition that gets checked. Low grades of this shock doubtless accompany all unexpected perceptions; and every perception is more or less unexpected. Its lower grades are, as I opine, not without experimental tests of the hypothesis, that sense of externality, of the presence of a *non-ego*, which accompanies perception generally and helps distinguish it from dreaming. (1.332).

Hence, man is engaged in the process of inquiry precisely in

order to eradicate the feeling of doubt that is at the origin of the

inquiry itself. As Peirce says, in the development of the inquiry

Every man is busily at working to bring to an end that state of things which now excites him to work" (1.392).

The justification for all this cognitive activity is the

defence of our mental world from external influences:

We live in two worlds, a world of fact and a world of fancy. Each of us is accustomed to think that he is the creator of his world of fancy; that he has but to pronounce his *fiat*, and the thing exists, with no resistance and no effort [...]. For this reason we call the world of fancy the internal world, the world of fact the external world. In this latter we are masters, each of us, of his own muscles, and of nothing more.

---

reacting each upon the other. In one the action is generally more active, in the other more passive; but precisely what this difference consists in I do not feel sure. I think, however, that the will to produce a change is active, the will to resist a change is passive [...]". [1.334]

But man is sly, and contrives to make this little more than he needs. Beyond that, he defends himself from the angles of hard facts by clothing himself with a garment of contentment and habituation. Were it not for this garment, he would every now and then find his internal world rudely disturbed and his fiats set at naught by brutal inroads of ideas from without. I call such forcible modification of our ways of thinking the influence of the world of fact or experience. But he patches up his garment by guessing what those inroads are likely to be and carefully excluding from his internal world every idea which is likely to be so disturbed. Instead of waiting for experience to come at untoward times, he provokes it when it can do no harm and changes the government of his internal world accordingly. (1.321).

So that summarizing:

Facts are hard things which do not consist in my thinking so and so, but stand unmoved by whatever you or I or any man or generations of men may opine about them. It is those facts that I want to know, so that I may avoid disappointments and disasters. Since they are bound to press upon me at last, let me know them as soon as possible, and prepare for them. This is, in the last analysis, my whole motive for reasoning. Plainly, then, *I wish to reason in such way that the facts shall not, and cannot, disappoint the promises of my reasoning. Whether such reasoning is agreeable to my intellectual impulses is a matter of no sort of consequence. I do reason not for the sake of my delight in reasoning, but solely to avoid disappointment and surprise.* [my italics] Consequentially, I ought to plan out my reasoning so that I evidently shall avoid those surprises. That is the *rationale* of the English doctrine. *It is as perfect as it is simple.*" (2.173).

Obviously, according to this approach the only justification

for reasoning or searching knowledge

[...] is that it settles doubts, and *when doubt finally ceases, no matter how, the end of reasoning is attained* [my italics]. Let a man resolve never to change his existing opinions, let him obstinately shut his eyes to all evidence against them, and if his will is strong enough so that he actually does not waver in his faith, he has no motive for reasoning at all, and it would be absurd for him to do it. (7.324)[80]

As is well known, in *The Fixation of Belief* Peirce lists four ways of obtaining the cessation of doubt, the settlement of opinion and hence the acquisition of a state of mental *ataraxia:* tenacity, authority, a priority and scientific inquiry. According to Peirce the first three methods, in the long run, inevitably fail to keep the

---

80) See 5.372. Same discourse is valid for the absence of moral consciousness, cf. 8.45.

human mind safe from unwanted surprises. Only when he has reached the scientific method can man then cope with reality in the best way. At this point, an aspect of Peirce's theory of knowledge turns out to be controversial.

I believe that, unfortunately, Peirce is either too optimist on the open-mindness of our HKS, or too sceptical about the potentialities of the three first methods, especially tenacity and authority.[81] Peirce's excessive confidence in the fact that tenacity and authority quickly fail to resist the test of life may be due to two reasons.

The first reason is that the type of knowledge he has in mind is *timeless* knowledge, ideally speaking, the final picture of the world that all human knowing subjects will agree on. So far, I believe Peirce is right when he says that in the long run non-scientific methods will be certainly replaced by the scientific. This latter provides the best "reaction" against reality. No "defence" could be more effective against external reality than the scientific method. Yet, exactly the fact that it is an *ideal* picture of the development of human knowledge makes his position somewhat suspect. Sometimes, Peirce still exhibits a residual version of the AP in describing the nature of the scientific investigation. This may be the second reason why he is so confident concerning the development of the scientific method. Because of his faith in an epistemophilic impulse (cf. his notion of *Gnostic Instinct* in 7.58), Peirce seems to oppose the idea both that man could be *ethically* justified in disregarding the scientific method and then that man could enjoy a happy life in this world despite his nescience. Note that, according to Peirce, there is no dichotomy between empirical and scientific

81) Cf. for example 2.655.

knowledge,[82] and the dialectic doubt/belief applies to the former as well as to the latter. The scientific "defence" of man against reality represent the best answer to genuine doubts. Yet, we need to recognize that, notwithstanding the homeostatic picture of science, in the background there is still a perceptible vision of man as spontaneously tending towards the acquisition of knowledge just for the sake of knowledge. When he comes to speak of the nature of the scientific inquiry, Peirce can hardly resist the *ethical* appeal a` la Locke of the notion of epistemophilia.

The fact that Peirce still exhibits a residual notion of the *vis cognoscitiva* in respect to scientific knowledge, casts a clear light on an important aspect of his thought. We know that Peirce's pragmatism represents a radical break from the Cartesian tradition. Peirce reacted against the Cartesian epistemological turn probably also because he was well aware of a more medieval image of the process of knowing, as a mutual relation between knower and known. In this sense Peirce's pragmatism is also a break from the notion of a Cartesian *vis cognoscitiva* that is emptied of its ontological correspondence. Although in *large part* Peirce doesn't simply *go back* to a pre-Cartesian approach, as for example Neoscholastic philosophers do, yet there are, without doubt, Scholastic influences at work, at least insofar as they provide a means of escaping the Cartesian picture of knowledge. Certainly, in re-acquiring a notion of knowledge as the result of an interplay between man and reality Peirce's theory of doubt and belief goes *beyond* Descartes, for his theory of doubt and belief is definitely not a revival of medieval epistemology. Yet, it is due to his knowledge of what *epistemology* was before Descartes that Peirce could realize the importance of the

82) Compare for example 6.452-493 - where Peirce argues that scientific knowledge is more than a mere quest for mental satisfaction, and 2.754, where Peirce accepts a continuity of knowledge from animal instinct to scientific theories.

Cartesian turn and eventually individuate its error. So we may conjecture that Peirce's notion of a Gnostic Instinct and his ethical conception of the desire for knowledge, both emerging sometimes in his conception of scientific knowledge, represent the price he had to pay to the medieval image of man, for having implicitly used medieval philosophy as the lever to unhinge Descartes' epistemology.

If I'm right, then the Aristotelian residue in Peirce's theory of knowledge can be eliminated. Man pursues knowledge only for the sake of his mental peace, and science can be considered only a more effective instrument for obtaining the same goal (any other consideration about other drives of the process of knowing like vital needs, curiosity, social position, wealth etc. being equal). As Peirce himself says:

> Hence the sole object of inquiry is the settlement of opinion. We may fancy that this is not enough for us, and that we seek, not merely an opinion, but a true opinion. But put this fancy to the test, and it proves groundless; for as soon as a firm belief is reached we are entirely satisfied, whether the belief be true or false." [5.375].

According to the more original core of Peirce's epistemology, it is not that science describes reality better than any other non-scientific method, but that it answers its questions in a more effective way. Likewise, it is not that Achilles' shield mirrors any better the essence of his enemies' weapons, but that it is the best shield against them.[83] Quoting Peirce once more, we don't search for knowledge just for its own sake,

> On the contrary, we cling tenaciously, not merely to believing, but to believing just what we do believe. [5.372].

---

83) These remarks imply some rather radical visions about a number of epistemological issues, especially the nature of truth. In a different context I would endorse a version of theory of truth which could allow me to speak of *adequacy* of true statements to the reality they refer to, yet not in terms of mirroring correspondence, but rather in the same way as an answer is "adequate" (or correspond) to a question, and it tries to cope with it.

According to this "purified" Peirceish perspective, we can improve the previous version of the Peirceish Postulate by saying that:

D_{30}) a post-Cartesian version of the Peirceish Postulate (the PP) holds that: "man has a spontaneous, inborn and inertial, mental *conatus* that would make him persevere in his own static state of nescient ataraxia, unless he is compelled to change that state by some external force impressed upon his mind. Such a *conatus* is the conservative force that activates the process of knowing at the intellectual level. It makes the human mind react against the ontological pressure coming from the contrasting presence of external reality. Its goal is the restoration of a homeostatic, peaceful state of ataraxia, by means of the production of R-knowledge."

Unfortunately, the Aristotelian residue has an important function within Peirce's epistemology. It is the background condition whereby Peirce can eventually disregard, as non problematic, questions about the few cases in which man really seems to be pursuing knowledge just for the sake of knowledge. By eliminating any Aristotelian residue, D_{30} faces the crucial problem of how we account for these few cases. The PP seems to have an impossible task. Although PP^{D30} is perfectly consistent with our ordinary evidence that men don't search for knowledge for its own sake, it still leaves unanswered the question concerning those few cases in which there seems to be a pure search for knowledge for its own sake.

In the last chapter I mentioned the problem of explaining the existence of indifference towards the search for knowledge if we accept the AP: such indifference seems to be counter evidence to the AP, and consequently presents the AP with a challenge. Similarly, an Anti-Aristotelian Postulate that defends an *inertial* and *static* interpretation of the genetic principle of the process of knowing, faces the problem of explaining those instances which *seem* to manifest an interest in knowledge purely for its own sake, for they, likewise, appear to be counter evidence to that thesis. I believe the solution of the problem lies in the fact that D_{30} generally refers to

the *simple relation occurring between the human mind and reality*. In this way it misses an important distinction between what may count as external reality for *the human mind* and what may count as external reality for a *human mind*. In the former case, it is the physical world that faces the human mind, in the latter case, it is the physical world *and all the previous products of other human minds* that face an individual human mind. D_{30} speaks of intellectual knowledge as a reaction of the mind against reality as the physical world. In order to understand how cultural phenomena like philosophy may occur, we need to focus on the notion of intellectual knowledge as the reaction of a *single mind* against anything that could count as external and extraneous to her, from a desk to a painting, from a scientific theory to a poem.

The introduction of this final distinction can cover the explanatory role that in Peirce's epistemology may be played by the Aristotelian residue. By means of it the Peirceish Postulate can come to explain also what is that *intellectuals, philosophers* and *scientists*, and in a minor measure all men, are actually doing when they seem to be pursuing knowledge for its own sake. In fact, they would be reacting not only against the external physical world, but also against the external world of culture. The process can be easily summarized in the following logical stages:

i) at the beginning the human mind emerges from the physical world by reacting against the natural pressure that this latter exercises on it;

ii) such a reaction is concretized into R-knowledge;

iii) R-knowledge produces human history and culture;

iv) each single mind finds herself within a gradually more and more complex physical and cultural environment to which she reacts by producing additional R-knowledge hence more history and culture.

The process of knowing-reacting against external reality comes to include any sort of reality external to a single mind. According to this last adjustment, we can modify the formulation of the PP thus:

D_{31}) a post-Cartesian version of the Peirceish Postulate (the PP) holds that: "each person has a spontaneous, inborn and inertial, *mental conatus* that would make her persevere in her own static state of *nescient ataraxia*, unless she is compelled to change that state by some external force impressed upon her mind. Such a *conatus* is the conservative force that activates the process of knowing at the intellectual level. It makes the human mind react against the pressure coming from the contrasting presence of physical and cultural realities. Its goal is the restoration of a homeostatic, peaceful state of ataraxia, by means of the production of R-knowledge."

According to D_{31} man does not bear *any kind* of reality too much, *including historical reality*, the kind that he is both the maker and master of. The origin of the search for knowledge is not the *Cartesian malady*, but a *mental disturbance* due to empirical or cultural factors.[84] When there is something like a desire for knowledge, this is a sign that such empirical or cultural *disturbances* are in action. Analogously, the intellectual process of knowing can be interpreted as a sort of "cognitive therapy"[85] against physical and cultural reality, and the production of historical and cultural realities are a by-product of such a mental reaction. The search for knowledge in its purest aspect, disregarding any practical reward, is not for the sake of knowledge but for the sake of the well-being of mind. As soon as the individual mind can, as soon as her "wounds" have become "scars", she dedicates herself to activities other than "searching for knowledge".

The conservative principle of the genesis of the P-knowing leads to the homeostatic tranquillity of beliefs, not to the Aristotelian always-growing encyclopedia. Then, if by "philosopher"

84) Cf. also the phenomenon of "Doubting Mania" (Lalande [1962], p.250).
85) Cf. what Curley [1988], p.130 and ff. says on Spinoza's interpretation of knowledge as a *cognitive therapy*.

we understand "someone who loves knowledge just for the sake of knowledge" then no man is a philosopher. But if by a "philosopher" we mean "someone who loves knowledge because, although it requires the difficult activity of elaboration/ acquisition, it is the only defence against reality", then the intrinsic nature of man is philosophical. The PP makes clear that what the single mind likes is not *the search for knowledge* for its own sake, but *the relief* that the acquisition of knowledge brings to her at the end of the road of inquiry, once external disturbances are finally settled. Men are forced to know and to keep the process of knowing open by the external pressure of natural and historical realities. It is only because of the dialectic between *reactive conservatorism* and *desire for a mental peace* free from any pressure, both ontological and cultural, that the boundaries of human knowledge are always advancing. In this sense the search for knowledge is a never-ending process because man keeps on trying to settle his doubts once and for ever. New human minds create their own cultural armour against the external world, both physical and cultural. Other future human minds will be forced to keep the defensive process in action also by the pressure of the same armour built by previous minds. The search for knowledge progresses because different human minds melt and re-melt the iron of the armour that they tend to build around themselves. Man has a fundamentally conservative mind, he does not like to have too many ideas and of those few, he doesn't like to change them, unless someone is able to show him that the new ideas could be much more useful. The majority of men are "strong-minded" in this sense. Once and for all they have "made up their minds" on an immeasurable amount of topics. By means of knowledge, men "close their minds" in the most effective way against any further intrusion of external reality. Luckily enough, man is *narrow minded* in respect to reality and most

of the culture, both humanistic and scientific, and its theoretical dilemmas. Man doesn't bear very much any kind of reality, and so his mind is so made as to enable him to leave the greatest part of reality outside of her business. As Peirce says:

> The problems that present themselves to such a mind are matters of routine which he has learned once for all to handle in learning his business" [5.368].[86]

Yet, sometimes, some individuals feel more than others new problems coming both from the natural and the historical-cultural environments. From the point of view of the PP, their being more "open minded" than others, their less developed capacity of "settling their minds", is a miserable state that, however, enables them to feel the restriction of the cultural walls within which man could otherwise soon enclose himself. It is a "miserable state" because, although an oyster which is more likely to be penetrated by external reality will be also more likely to produce a beautiful pearl, this "openness" of the oyster will be a disadvantage for the animal, the pearl still being the result of a reaction against a disturbance. Then the "open minded" are those who impede the final fixation of beliefs. Once more, not for the sake of knowledge in itself, or because man as such is not strong-minded enough to carry on the enterprise to its end, but because for them the pressure coming from history and culture is still great enough as to provoke further reactions. Such a process explains why, despite all the other favourable factors that dominate the development of culture in advanced societies, there are phenomena like neo-analphabetism. In a "cognitively protected environment" the human mind tends to a state of nescience, and people may even forget how to write. In an advanced

---

86) In Psychology this phenomenon has been studied under the label of "Rigidity" or "Einstellung". It is defined as "a mental set or relatively inflexible attitude; a propensity to react to or perceive a situation in an established way, e.g. the tendency to apply formerly successful techniques to the solution of new problems" (Goldenson [1984], p. 384). The problem has been interpreted in terms of a sort of mental inertia, cf. Gorman's article on "Rigity" in Corsini [1984], pp.244-245.

society, individual minds can more easily remain in a state of cognitive acquescience.

Certainly the second-stage reaction can be felt less urgently, since after all there is already enough "knowledge-reaction" as to defend each single mind against a first attack from reality. In fact the pressure can decrease so much as to induce at a certain point, some people, e.g. the professional philosophers, to believe that the search for knowledge is a pleasure pursued by every men just for the sake of knowledge.[87] In a developed culture a philosopher can reach such a point of forgetfulness as to believe that the wall between the mind and reality is a prison for the former, not a defence agaisnt the latter. To the "open minded people" is left the hard task of making the history of culture grow, without being stifled by its own limits. Although from this point of view *the search for knowledge is not a pleasure*,[88] it can be seen as an onerous duty. The egoistic desire to survive pushes each single human mind to appreciate the fact that there is a process of knowing whereby her and all the other minds can defend themselves ontologically from the world and from their respective products.

This is the general picture of man's interest in knowledge that we receive from the formulation of the Peirceish Postulate. We can

---

87) All this could explain where Heidegger went wrong. His discovery that metaphysics is always a modification of the Being into entities does not imply that such an epistemic reaction against what there is in the world should be surpassed. His wish is like that of the Kantian dove that is convinced he could fly better if there wasn't so much air impeding his flight. It is only the rational process of knowing and the dialectical accumulation and overcoming of R-knowledge that makes possible human history. I believe that a thought to what Nazism was in terms of "closeness" to the vital force of nature, is unavoidable. Man must be seen responsible of his own history, and as standing on his own feet, not subjected to any "destiny of Being". Someone may think of a revival of a Metaphysics of Being only because there has been plenty of ontological reaction against reality.

88) Then Locke is right both in being tolerant with men who are not interested in searching knowledge for its own sake and in praising the search for knowledge. He is only wrong in rooting this latter in the necessity of the occurrence of a free, epistemophilic impulse instead of a rational duty of Kantian taste.

turn back to the principal issue and see whether, and if so, what difference the substitution of the AP with the PP can make within the Traumatic Doubt.

VI.7 AS_S: THE APPLICATION OF THE PEIRCEISH POSTULATE TO THE TRAUMATIC DOUBT

It will be remembered that the theoretical contents of the Perpetual Check of Reason were provided by the conjunction of the epistemological anti-realism as defined by D_{15}, with the minimal ontological realism as defined by D_{18}, but that (Anti-$R_{ep.}$ $D15$ + R_{ont} $D18$) could be really seen as the proper logical analysis of the Traumatic Doubt "reality in itself may be completely different from what we take it to be" only if we were to add to them the Aristotelian Postulate (AP^{D27}). In chapter III I asked whether it was possible to have an anthropological strategy that could solve the TD by working on the Aristotelian Postulate. Such a possibility has led the investigation to a detailed reconstruction of the contents of the AP and a discussion of the grounds for accepting it. A large part of' this chapter has been taken up by the elaboration of a better Postulate that could replace the AP. The anthropological strategy consists now in attaching to (Anti-$R_{ep.}$ + R_{ont}) the PP instead of the AP.
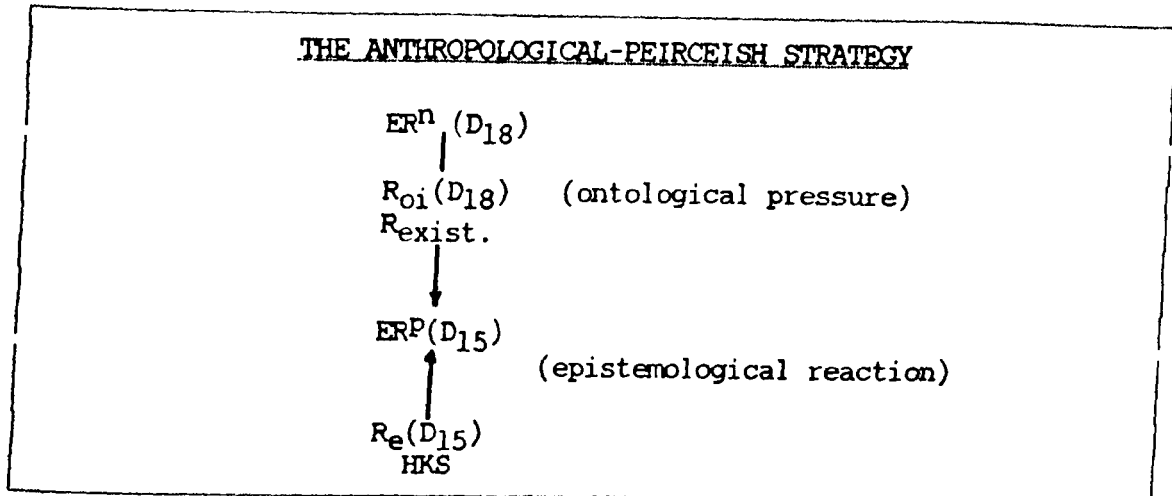
If we interpret the principle governing the genesis of the process of knowing in terms of the action of a conservative *conatus* for peace of mind rather than in terms of the action of a desire for knowledge for its own sake, we have that the Doubt is no longer traumatic. On the contrary, it represents a possibility that the HKS can rather welcome. Let me be more specific.

Thanks to the Peirceish approach we can admit a strong version of ontological realism while assuming that the principal task of the epistemic relation occurring between HKS and ER is one of defence of the human mind against ER. The process of knowing has the goal of producing a barrier that limits the pressure of ER upon the mind. In this sense the clause "anti" in "epistemological anti-realism" refers to the conception of knowledge as an epistemic reaction against ER. Whatever the nature of ER may be in itself, not only is HKS not interested in grasping it, but HKS is keen on leaving it outside his mind, on reducing or subjugating it to his mental schemes. It is not merely that it doesn't matter if, in establishing his reign over reality, man unfortunately looses the possibility of knowing the intrinsic nature of this latter. Rather, the hypothesis is that the scope of knowledge is that of neutralizing ER, of leaving reality outside, in transforming what it is in itself into something which is what it is only because of himself. There may be more or less effective ways to cope with this task, and we may call the most efficacious the scientific: the result doesn't change. The gap occurring between ER^p and ER^n has to be interpreted no longer as an inescapable and unfortunate event, but as the real target of the process of knowing. It is only in the struggle for positing a gap between brute fact and herself that the mind emerges. By maintaining such a hiatus between reality in itself and its knowledge the mind can manage to survive. The scope of the process of knowing is not in grasping the whole nature of reality, forcing the mind to the lethal risk of an "ontological over-exposure", but letting reality drip into the internal world as peacefully as possible.

If we find this option acceptable, then I believe there is some irony in the so-called Traumatic Doubt. For, according to the Peirceish Postulate, to say that reality in itself may be completely

different from what the HKS takes it to be, would be like warning the gambler that he may have won his bet or the warrior that he may have defeated his enemy. If we did, that would simply mean that we didn't understand what the purposes of their actions were.

As for the strategies sketched in chapter III, this can be represented by a graphic scheme:

THE ANTHROPOLOGICAL-PEIRCEISH STRATEGY

ER^n (D_{18})

$R_{oi}(D_{18})$ (ontological pressure)
$R_{exist.}$

$ER^p(D_{15})$

(epistemological reaction)

$R_e(D_{15})$
HKS

scheme 15

Visually, the mind doesn't "go", epistemically, towards external reality, but it is rather external reality that "goes" towards the mind. Reversing the Baconian image, it is the mind that attempts a *cognitive defence* against the intrusion of external reality into her internal world, not nature that has to defend itself against the scientific aggression of the human mind. Accordingly, in the scheme ER^n appears to exercise an alienating pressure on HKS that would be successful, as it is in the animals, if it were not for this latter cognitive reaction. This produce ER^p, which can be identified in part with R-knowledge as culture, that is with the accumulation of knowledge elaborated through the last few thousands years of human civilization, and in part with R-knowledge as empirical knowledge, that is the product of each individual human mind (the perspective here is still very Kantian). The philosophers, the intellectuals and the scientists are those who persistently react against updated versions of ER^p. Every reaction creates fresh R-knowledge against

whose pressure one day some future generation will have to react. And those generations will, like ourselves, have to balance the tasks of providing a boudary against brute reality, and not making that boudary so inflexible that it becomes a cage for the mind.

As I anticipated in III.5.c, it is now understandable why I said that, according to this Peirceish perspective, the chess-like game of knowledge played by ER and HKS ends with a draw appreciable by the HKS. None of the two players succeed in assimilating the other to itself completely, the non-mind to the mind or the mind to the non-mind. But for the human mind such a draw amounts to winning the game, for she is playing with the black, that is she is defending herself. The Perpetual Check is that of Reason or the mind *escaping* its capture by external reality, not the other way round. The fact that it is "perpetual" indicates the never-ending development of the process of knowing, which always produces new R-knowledge.

I started this investigation by a gentle take-off, the several distinctions necessary to understand our use of mental dichotomies. I mean to end it now by a gentle landing, a little piece of prose.

In chapter IV I identified the Aristotelian man in Ulysses or Faust. Peirce has now suggested to us an anti-Ulyssean or anti-Faustian hero. Unfortunately, the literary tradition, as far as I know it, does not provide us with a good character for such a role, so let me call it, in anteposition to Ulysses, Aeneas. In the war of Troy, Aeneas is on the other side, he is within the wall and wants to keep the enemy outside. He is a man of religious faith. He will be the mythical founder of Rome, and the Roman culture is a much more pragmatic than the Greek. Finally, like Ulysses, Aeneas will be forced to travel around the world, but unlike Ulysses (at least as far as the post-Renaissance's images of Ulysses are concerned),

Aeneas is looking forward to settling down in his new city, a new community, and he doesn't like intellectual adventures. Aeneas is searching for his peace of mind, is not curious at all and wants final answers to his doubts and dilemmas, not new questions. Our Aeneas represents the new hero emerging from the PP. We can let him meet a version of the Cartesian Mephistopheles or a Nagelian Neurologist[89] and see what happens.

Suppose Aeneas is in his tent, near the Tiber, on one of the seven hills where Rome will be built. It is dark, he is sitting in front of the fire, having had a very tiring day. He sees some shadows, he realizes that they are not real objects and then he starts wondering whether the entire world as he knows it could be just a mere production of his mind. Like Descartes, he starts doubting about everything. At once he says to himself: "reality may be completely different from what I take it to be". But after a brief pause he adds: "So what ? Thanks to the gods I have my knowledge which keeps brute facts outside of my mind. As long as this filter works reality has to be different from how I know it. It is only if reality should come too close to me that I should be worried. My knowledge is an instrument useful for dealing with epistemic problems. "Knowing" is the only way I can defend myself against reality. Without the process of knowing 'facts would stay in my mind until they run it'[90]. That my vision of the world is just mine in so far as I'm a human knowing subject, does not trouble me. Knowledge is for life, and the world willy-nilly has to withstand my epistemic reaction, for at least this is something it cannot overcome".

We must suppose now that a Cartesian-like hypothesis of the deceptive demon enters into his mind. Furthermore, as Strawson has

---

89) Cf. Nagel [1986], pp.71-3.
90) Cf. the quotation in the page-title

interestingly underlined,[91] a sceptical challenge is not radical enough if it is not logically possible to suppose that, at a certain time, there will be a sort of shift in the appearance of things, e.g. from being blue to becoming green. So let us imagine Aeneas yet more tired, still wondering: "My pragmatic position seems unassailable, and yet all my life could be a dream, and the gods could just been amusing themselves in making me believe what in fact it has no reality at all. But even if it were so, would this affect my life ? This cup contains what I think is wine. It tastes like wine, it looks like wine, it has exactly the same effects as if it were wine. But then, whatever this liquid may be *in se ipsum*, as long as it has all the properties of wine it is wine. And if the gods should show me that what one day I considered wine is no longer wine but water, and water is now wine, then from that day on I will call the water wine and the wine water. And I will wash myself with what was wine and now is water, and I will drink to the gods with what was water and now is wine. For on the one hand, if what is in fact water should for all the times in the future behave like wine and what is wine *in se ipsum* should nevertheless behave like water, then is this a problem ? Certainly not, because I will never be surprised to find water in my barrels, and I will always be able to predict my drunkenness as one of the effects of that liquid that once and for all the gods have decided to make behave like what I considered wine. And if, on the other hand, one day all the world should change, and the water should behave like wine and wine like water then either I won't be able to realize this change, and so my knowledge will still cope with brute facts, or I will detect this change, in the same way as I realize that the three has lost its leaves. And I will say 'It is no longer summer, and winter is approaching, the tree was green and now is

---

91) Strawson [1985]

brownish'. 'What could enable the mind to know physical things which do not physically influence it and which it does not influence ?'[92] Language is what allows me to deal with the world, and language is my own creature, it is something I, as a member of this community, am the master of. There is no demon who can impede my mind to detach herself from the brutal reality by means of language, unless such a demon wants at the same time to destroy my mind. But although I cannot impede this last event to happen, yet *mens faber realitatis suae*, and *within her kingdom my mind is the only god I recognize*".

VI.8 AN OPEN CONCLUSION: SIX QUESTIONS FOR A FUTURE GNOSEOLOGY

Among the different objections that could be moved against there is the accusation that the substitution of the AP with the PP is a strategy that can work only because it is too powerful. That is to say, it is only because the introduction of the PP changes in fact the rules of the game that the game can be won. By adopting the kind of Peirceish epistemology outlined above, I may be supposed to have overstepped the limits within which the problem had to be formulated: it is too easy to solve an epistemological problem by means of a metaphysical description like the one implied by the interpretation of the process of knowing in terms of action/reaction. Furthermore, someone may want to say that the anthropological solution of the TD amounts to the basic reasoning of the fox concerning the grapes. Since she cannot reach them she declares they are still sour. It is because, according to the TD, knowledge of ER^n cannot be obtained that I have tried to argue that there isn't any desire for it.

There are two answers to these general objections. First, I've already admitted that maybe the fundamental problems in epistemology

92) Peirce, *ibidem*, 5.341

are insoluble without partially overstepping into some kind of hypothetical, ontological description of what the relation between man and reality may be. In the previous chapter I also made a distinction between metaphysical description and epistemological justification. The Peirceish Postulate seems to fulfil both conditions. I've actually argued in favour of this point in a previous work, where I supported the necessity of a philosophical theory of the genesis of the process of knowing in terms of a metaphysical description of such a relation. In that work I called this special branch of philosophy that lies on the border between ontology and epistemology, *Gnoseology* (see Preface).

The second answer refers to the limits of the present work. This last chapter relies on a theory of knowledge that presupposes a strong metaphysics. The particular Peirceish Epistemology that underlies the anthropological strategy has only be outlined above. The target of the present work has been that of supporting the substitution of the AP by the PP as an interesting and fruitful hypothesis, not that of giving the full development of a Peirceish Gnoseology. Yet, at the end of this work, it is worth presenting eight key-questions prompted by the assumption of the Peirceish Postulate, six of which represent the central issues any future Gnoseology that shares the approach advocated in this work will have to face.

What is the action (move with the white) performed by ER on HKS' mind ? We have seen that Peirce speaks of a "pressure" operated by brute facts on the mind. This refers, not by chance, to a pre-Cartesian philosophy of knowledge. It has much to do with the Aristotelian-Scholastic idea of a strict relation between reality and man in the constitution of knowledge, and with the idea that the mind actually becomes what she knows, and this at the level of perception.

An answer to this first question could be one in terms of an investigation of a theory of perception as far as an isomorphic model of empirical knowledge is concerned.

What is the kind of action performed by historical/cutural ER on HKS' mind ? Is it different from (i) ? It seems that any possible answer to this question should take into account the possibility of a common theoretical basis where the alienating action of human culture/history on a single mind, the anxiety it produces and human mind's defence of her self-identity can encounter.

What is the nature of knowledge as a mental reaction (move with the black) against external reality ? Newton says that the reaction is always adequate to the action (corpus omne tantum pati reactione quantum agit in alterum).[93] I believe that a future Gnoseology should investigate (a) what is the formal relation between perceptual action of reality on mind and (b) the mental reaction in terms of beliefs which are justified and true, by investigating (c) the various understandings there have been of the notion of truth as adequatio rei et intellectus.

What is the relation between knowledge-reaction and both language and logic ? An answer to this question could still be developed within a Peirceish semiotics, where language and logic could be treated as two different symbolic "weapons" used by man in his defence against ER.

What is the nature of the state of nescient ataraxia that mind is supposed to be striving for, and how is it connected with all the other aspects of human mental life ? And, if knowledge is a cognitive reaction to reality, is this connected with the problem of dualism mind/brain, and if so, how ? Both questions could be solved within a

---

93) Cf. Herivel p.31

theory of mind which should also explain the relation between knowledge and the rest of the activity of thinking.

Precisely, what does the dialectic development of human culture in terms of action and reaction between reality and knowledge consist of ? To answer this question can be seen the task of a philosophy of history.

Are there moral conclusions to be drawn from the whole picture given by the Peirceish Gnoseology ? Of course, if there are any, their investigation belongs to the field of Ethics.

The conspicuous importance of these questions show that, even if one should have some doubts on whether it is the best strategy against the Traumatic Doubt, still the anti-Aristotelian approach to the genesis of the process of knowing must be certainly recognized as an interesting program of research, rich in important consequences. In this thesis I've tried to support the value of such an approach. I hope in the future to be able to answer all the previous questions.

Bibliography

Adickens L., 1924, *Kant und das Ding an sich*, Berlin.

Albert the Great, 1960, *Metaphysica Libri Quinque Priores*, in *Opera Omnia*, Tomus XVI Pars I, Monasterium Westfalorum in Aedibus, Aschendorff.

Alcorta J.I. 1960, "La Spontaneite' de la Connaissance theorique et pratique selon Saint Thomas" ("The Spontaneity of theoretical and practical Knowledge in St. Thomas"), in "L'Homme et son Destin", *Actes du Premier Congres International de Philosophie Medievale*, 1958, (Louvain-Bruxelles), 1960, Editions Nauwelaerts, pp. 555-560.

Alexander of Aphrodisias 1989, *On Aristotle Metaphysics*, Dooley (tr.), Duckworth, London.

Almeder R. 1980, *The Philosophy of Charles S. Peirce, A Critical Introduction*, Blackwell, Oxford.

Aristotle, *De Anima*, Eng. tr. in Ross W.D. (ed.) [1960], Clarendon Press, Oxford.

Aristotle, *Metaphysics*, Eng. tr. in Ross (ed.) [1960], vol.VIII.

Aristotle, *Nichomachean Ethics*, Eng. tr. in Ross (ed.) [1960], vol.IX.

Aristotle, *Posterior Analytics*, Eng. tr. in Ross (ed.) [1960], vol.I.

Atkins S. 1973, "Motif in Literature: The Faust Theme", in Wiener [1973], vol. III, pp.244-253.

Augustine A., *De Civitate Dei*, in *Sancti Augustini Opera*, *Christianorum Series Latinas*, vol. XLVII-VIII, [1960] Typographi Brepols, Turnholti.

Augustine A., *De Vera Religione*, in *Sancti Augustini Opera*, *Christianorum Series Latinas*, vol. LV [1960] Typographi Brepols, Turnholti.

Bacon F., *De Augmentis Scientiarum*, in Spedding J. et al. [1858-74], vol. 1.

Bacon F., *Novum Organum*, in Spedding J. et al. [1858-74], vol. 1.

Bacon F., *The Advancement of Learning*, in Spedding J. et al. [1858-74], vol. 3/4.

Barnes J. (ed.) 1984, *The Complete Works of Aristotle*, the revised Oxford translation, Princeton U.P., Princeton, New Jersey.

Beck L. W. (ed.) 1974, *Kant's Theory of Knowledge*, Selected papers from the Third International Kant Congress, Reidel, Holland.

Berkeley G. 1964, *A Treatise concerning the Principles of Human Knowledge*, in Luce A.A. and Jessop T.E. (ed.s), *The Works of George Berkeley Bishop of Cloyne*, Bibliotheca Britannica Philosophica, Nelson, London, vol. 2 (first published in 1734).

Bernard W. 1977, "Psychotherapeutic Principles in Spinoza's Ethics", in Hessing [1977], pp.63-80.

Berti E. (ed.) 1978, Aristotle on Science - The "Posterior Analytics", Proceedings of the Eighth Symposium Aristotelicum held in Padua from September 7 to 15, Editrice Antenore, Padova.

Bird 1962, *Kant's Theory of Knowledge*, Routledge and Kegan Paul, London.

Black M. 1933, *The Nature of Mathematics*, Routledge and Kegan Paul, London.

Blaise A. 1975, *Corpus Christianorum Continuatio Medievalis Lexico Latinitatis Mediiaevi*, Brepols, Turnholti.

Boethius of Dacia 1976, *Boethii Daci Opera*, Volumnis VI, Pars II, Opuscola, "De Summo Bono", Det Danske Sprog- Og Litteraturselskab, Hauniae.

Boscherini E.G. 1970, *Lexicon Spinozanum*, Martinus Nijhoff, La Haye.

Boscherini E.G. 1977, "Necessity and Freedom, Reflections on texts by Spinoza", in Hessing [1977], pp.90-107.

Brentano F. 1969, *The Origin of Our Knowledge of Right and Wrong*, Chisholm R.M. (ed.), Routledge & Kegan Paul, New York (originally published in 1889)

Brentano F. 1977, *The Psychology of Aristotle In Particular His Doctrine of the Active Intellect*, Univ. of California Press, Berkeley (originally published in 1867).

Buridan J. *Quaestiones super Octo Libros Physicorum*, Paris 1509, 1516.

Burnyeat M.F. (ed.) 1983, *The Skeptical Tradition*, Univ. of California Press, London.

Burnyeat M.F. 1978, "Aristotle on Understanding Knowledge", in Berti [1978].

Burnyeat M.F. 1980, "Can the Skeptic live his Scepticism? in Schofield et al. [1980].

Burnyeat M.F. 1982, "Idealism and Greek Philosophy: What Descartes saw and Berkeley missed", *The Philosophical Review*, (41), pp. 3-40.

Cassirer E. 1951, *The Philosophy of Enlightenment*, (first published in 1932), Princeton U.P., Princeton, New Jersey.

Cassirer E. 1963 *The Individual and the Cosmos in Reinassance Philosophy*, Univ. of Pennsylvania Press, Philadelphia.

Cassirer E. 1963, "The Subject-Object Problem in the Philosophy of the Reinassance", in Cassirer [1963], pp.123-191.

Caton H. 1973, *The Origin of Subjectivity, An Essay on Descartes*, Yale U.P., New Haven and London.

Chisholm R.M. 1957, *Perceiving - A Philosophical Study*, Cornell U.P., Ithaca-New York.

Chisholm R.M. 1964, "Theory of Knowledge in America" first appeared in *Philosophy*, a volume in the series The Princeton Studies: *Humanistic Scholarship in America*, Prentice-Hall, Englewood Cliffs, New York, and then unmodified in Chisholm [1982], *The Foundations of Knowing*, The Harvester Press, Brighton.

Chisholm R.M. 1984, "The Intentional Approach to Ontology", in Cho K.K. (ed.) *Philosophy and Science in Phenomenological Perspective*, pp. 1-8, Martinus Nijhoff Pub., Dordrecht.

Cicero M.T., *De Finibus Bonorum et Malorum Libri Quinque*, Hutchinson W.M.L. (ed.) 1909, Edward Arnold, London.

Cicero M.T., *De Natura Deorum Libri Tre*, Pease A.S. (ed.) 1955, Harvard U.P., Cambridge Mass., 2 vols.

Cicero M.T., *Tusculanarum Disputationes*, Dougan T.W. (ed.), 1905, Cambridge U.P., Cambridge.

Coccio A. 1960, "Senso dei Limiti della Conoscenza umana in San Tommaso d'Aquino", ("Sense of the Limits of Human Knowledge in St. Thomas Aquinas") , in "L'Homme et son Destin", *Actes du Premier Congres International de Philosophie Medievale*, 1958, (Louvain-Bruxelles), 1960, Editions Nauwelaerts, Louvain, pp. 561-570.

Cohen I.B. 1971, *Introduction to Newton's "Principia"*, Cambridge U.P., Cambridge.

Cook J.T. 1986, "Self-knowledge as Self-preservation ?", in Grene and Nails [1986], pp. 191-210.

Corsini R.J. (ed.) 1984, *Encyclopedia of Psychology*, 6 vol.s, John Wiley & Sons, New York.

Cottingham J., Stoothoff R. and Murdoch D. 1984, *The Philosophical Writings of Descartes*, 2 vols., Cambridge U.P., Cambridge.

Crombie A.C. 1959, *Agustine to Galileo, Science in the Latter Middle Ages and Early Modern Times*, Penguin Books, London.

Curley E. 1988, *Behind the Geometrical Method - A Reading of Spinoza's Ethics*, Princeton U.P., Princeton, New Jersey.

Dal Pra M. 1975, *Lo Scetticismo Greco*, Laterza, Roma-Bari.

Dante A. 1984, *Le Opere di Dante Alighieri*, Edizione Nazionale a cura della Societa` Dantesca Italiana, Arnoldo Mondadori, Milano.

Dante A. *La Divina Commedia*, vol. 7 of Dante [1984].

Dante A., *De Monarchia*, vol. 5 of Dante [1984].

Dante A., *Il Convivio*, vol. 1 of Dante [1984].

De Wulf M. 1956, *An Introduction to Scholastic Philosophy, Medieval and Modern*, Dover Pubblications, New York.

Descartes R., *Principles of Philosophy*, in Cottingham J. et al. [1984], vol.1 (first published in 1644).

Descartes R., *The World: An Essay on Light*, in Cottingham J. et al. [1984], vol.1 (firs published in 1633).

Diogenes Laertius, *De Vitis Dogmatibus et Apophthegmatibus Clarorum Philosophorum*.

Dod B.G. 1982, "Aristoteles Latinus", in Kretzmann N. et al. [1982].

Doig J.C. 1972, *Aquinas on Metaphysics, A Historico-doctrinal Study of the Commentary on the Metaphysics*, Martinus Nijhoff, The Hague.

Donagan A. 1966, "'Does Knowing make a difference to what is known ?' a rejoinder to Mr. Post", *The Philosophical Quarterly*, (16), pp.352-355.

Dreyer 1966, *Kant's Solution for Verification in Metaphysics*, Toronto.

Dummett M. 1959, "Truth", *Proceedings of the Aristotelian Society* (59), pp.141-162.

Dummett M. 1963, "Realism", paper read at the Philosophy Society at Oxford, published for the first time in Dummett [1978].

Dummett M. 1978, *Truth and Other Enigmas*, Duckworth, London.

Dummett M. 1982, "Realism", Synthese (52), pp.55-112.

Duns Scotus, *Questiones in Libros Physicorum*, in *Opera Omnia*, editio nova iuxte editionem Waddingi, 26 vols., Paris, Vives, 1891-95.

Durandus de Saint-Pourcain, 1929 and 1935, *Questio de natura cognitionis*, ed. J.Koch (BGPM, XXVI), Aschendorff.

Eidelberg L. (ed.) 1968, *Encyclopedia of Psychoanalysis*, Collier-Macmillan, London.

Eisler R. 1971, *Kant Lexicon*, Burt Franklin, New York.

Eliot T.S. 1978, *Four Quartets*, Faber, London.

Elster J. 1983, *Sour Grapes - Studies in the Subversion of Rationality*, Cambridge U.P. Cambridge.

Enciclopedia Filosofica, 1967, Centro di Studi Filosofici di Gallarate, seconda edizione interamente rielaborata, Sansoni, Firenze.

*Enciclopedie ou Dictionnaire Raisonne` des Sciences des Artes at des Metiers* [1751-1780], Diderot M. and D'Alambert M. (ed.s), reprinted in 1966, Nouvelle impression en facsimile` del la premiere edition de 1751-1780, F. Frommann Verlag, Stutgart.

Feibleman J.K. 1970, *An Introduction to the Philosophy of C.S. Peirce Interpreted as a System*, M.I.T. Press, Cambridge Mass. (first pub. in 1946).

Hallett H.F. 1957, *Benedict de Spinoza, The Elements of his Philosophy*, University of London, The Athlone Press, London.

Hampshire S. 1956, *Spinoza*, Faber & Faber, London.

Hegel G.W.F. 1802, "Glauben und Wissen, oder Die Reflexionsphilosophie der Subjektivitat in der Vollstandigkeit ihrer Formen, als Kantische, Jacobische und Fichtesche Philosophie", *Kritisches Journal der Philosophie*, Zweiten Bandes erstes Stuck, Tubingen, pp.3-188, republished in *Werke*, Suhrkamp, Frakfurt am Main, 1978, vol.2.

Hegel G.W.F. 1968, *The History of Philosophy*, Haldane E.S. and Simson F.H. (tr.s and ed.s), Routledge and Kegan Paul, London, three vol.s (first published in 1840).

Hegel G.W.F. 1977, *Phenomenology of Spirit*, Miller A.V., Findlay J.N. (ed.s), Oxford U.P., Oxford.

Heidegger M. 1962, *Kant and the Problem of Metaphysics*, Churchill J.J. (ed.), Indiana U.P., Bloomington, Indiana.

Herivel J. 1965, *The Background to Newton's "Principia"*, Clarendon Press, Oxford.

Hessing S. (ed.) 1977, *Speculum Spinozanum 1677-1977*, Routledge and Kegan Paul, London.

Hessing S. 1977 "Freud's relation with Spinoza", in Hessing (ed.) [1977].

Hintikka J. 1973, *Time and Necessity: Studies in Aristotle's Theory of Modality*, Oxford U.P., Oxford.

Hintikka J. 1974, *Knowledge and the Known - Historical Perspectives in Epistemology*, Reidel, Dordrecht.

Hirst R.J. 1967, "Realism", in Edwards P. (ed.) *The Encyclopaedia of Philosophy*, London, vol.7, pp.77-83.

Hobbes T. *Elementorum Philosophiae Sectio Prima De Corpore*, in *The English Works of T.H.*, vol.1, (first published in 1655-6).

Hobbes T., *Leviathan*, in *The English Works of T.H.*, vol.3, (first published in 1651).

Hobbes T., *The English Works of T.H.*, 11 vol.s, London, 1940, second reprint Scientia Verlag, Aalen, Germany.

Horwich P. 1982, "Three Forms of Realism", *Synthese* (51), pp.181-201.

Hume D. 1967, *A Treatise on Human Nature*, Nidditch P.H. (ed.), Clarendon Press, Oxford (first pub. 1739).

Husserl E. 1969, *Ideas. General Introduction to Pure Phenomenology*, Allen and Unwin, London (originally published in 1913 with the German title *Ideen zu einer reinen Phanomenologie und phanomenologishe Philosophie*).

Hyppolite J. 1946, *Genese et Structure de la Phenomenologie de l'Esprit de Hegel*, 2 volls., Aubier, Paris.

James W. 1981, *The Principles of Psychology*, Harvard U.P., Cambridge Mass.

Kant I 1953, *Prolegomena to any Future Metaphysics*, Lucs P.G. (ed.), Manchester U.P., Manchester.

Kant I. 1961, *Critique of Pure Reason*, Kemp Smith N. (ed.), Macmillian London (first pub. 1781).

Kant I. 1967, *Philosophical Correspondence 1759-1799*, Zweig A. (ed.), Chicago.

Klein M. 1981, *Love Guilt and Reparation*, Hogarth Press.

Kleutgen 1868, *La Philosophie Scolastique*, (French translation from German), Paris.

Koyre` A. 1944, *Entretiens sur Descartes*, Brentano's, New York.

Kretzmann N., Kenny A., Pinborg J. (eds.) 1982, *The Cambridge History of Later Medieval Philosophy*, Cambridge U.P. Cambridge.

Kristeller P.O. 1972, *Renaissance Concepts of Man*, Harper & Row Pub., New York.

Kristeller P.O. 1984, "Sources of Spinoza's Ethics" in *History of European Ideas*, (5), pp.1-15.

Laird J. 1967, *Hume's Philosophy of Human Nature*, Archon Books, New York.

Lamb D. 1980, *Hegel - From Foundation to System*, Martinus Nijhoff Publishers, Dordrecht.

Latham R.E. (ed.) 1965, *Revised Medieval Latin Word-List from British and Irish Sources*, The British Academy, Oxford U.P., Oxford.

Latham R.E. (ed.) 1981, *Revised Medieval Latin Word-List from British Sources*, The British Academy, Oxford U.P., London.

Lear J. 1988, *Aristotle, The Desire to Understand*, Cambridge U.P., Cambridge.

Lecrivain A. 1986, "Spinoza and the Cartesian Mechanics", in Grene and Nails [1986], pp.15-60.

Leibniz W. 1840, *De Vero Methodo Philosophiae et Theologiae in Opera Philosophica*, Erdmann (ed.), Berlino.

Liddell H.G. and Scott R. (ed.s) (new edition) 1940, *Greek English Lexicon*, Oxford U.P., Oxford.

Locke J. 1985, *An Essay Concerning Human Understanding*, Nidditch P.H. (ed.), Clarendon Press, Oxford (first pub. 1690-1700)

MacDonald G. (ed.) 1979, *Perception and Identity*, Macmillan, London.

Maritain J. 1928, *Three Reformers*, Sheed and Warwd, London.

Maritain J. 1938, *The Degrees of Knowledge*, ed. by G.B.Phelan, Scribner, New York.

Martineau J. 1883, *A Study of Spinoza*, Macmillan, London.

Meerbote R. 1974, "The Unknowability of Things in Themselves", in Beck [1974].

Mill J.S. 1884, *System of Logic*, Longman, London (first pu. 1843).

Milton J. 1931, *Paradise Lost*, in Patterson F.A. (gen. ed.) Columbia U.P., New York, vol.2, part I.

Mohan R.P. 1963, *Teaching Thomism Today*, The Catholic University Press, Wahington.

Mondolfo R. 1958, *La Comprensione del Soggetto Umano nell'Antichita` Classica*, La Nuova Italia Editrice, Firenze.

Moore G. E. 1939, "Proof of an External World", in *Proceedings of the British Academy*, (25) reprinted in Moore [1959], chapter VII.

Moore G. E. 1953, *Some Main Problems of Philosophy*, Allen & Unwin, London.

Moore G. E. 1959, *Philosophical Papers*, Allen & Unwin, London.

Murphey M.G. 1961, *The Development of Peirce's Philosophy*, Harvard U.P., Cambridge Mass.

Musa M. (tr. and ed.) 1971, *Dante's Inferno*, Indiana U.P., London.

Nagel T. 1986, *A View from Nowhere*, Oxford University Press, Oxford.

Neri M.A.Z. 1974, "De la Naturaleza del Conoscimiento en el Pensamiento de Santo Tomas de Aquino" ("On the Naturality of Knowledge in St. Thomas Aquinas' Thought"), in "Tommaso d'Aquino nel suo Settimo Centenario", *Atti del Congresso Internazionale*, 1974 (Roma-Napoli), Edizioni Domenicane Italiane, Napoli, vol. 7, 436-441.

Newton I. 1972, *Philosophiae Naturalis Principia Mathematica*, Koyre` A. and Cohen I.B. (eds.), Cambridge U.P., Cambridge. (first published in 1687).

Newton's *Manuscripts*, Cambridge Univ. Library.

Niermeyer J.F. (ed.) 1976, *Mediae Latinitatis Lexicon Minus*, Brill, Leiden.

Nietzsche F. 1966, *Beyond Good and Evil, Prelude to a Philosophy of the Future*, tr. with a commentary by Kaufmann W., Vintage Books, New York (first published in 1886).

Ockham W. 1944, *Tractatus de Successivis*, Boehner P. (ed.), Franciscan Institute Publications, The Franciscan Institute.

Ockham W. 1951, *Commentary on the Sentences* in Anneliese Maier, *Zwei Grundprobleme der Scholastischen Naturphilosophie*, Rome.

OED, *Oxford English Dictionary*, second edition 1989, Oxford.

Oxford Latin Dictionary, Clarendon Press, Oxford, 1968.

Passmore J. 1961, *Philosophical Reasoning*, Duckworth, London.

Passmore J. 1985, *Recent Philosophers*, Duckworth, London.

Paton H.J. 1936, *Kant's Metaphysics of Experience*, Allen and Unwin, London.

Peirce C.S. 1871 "Fraser's Edition of The Works of George Berkeley" (Review], *The North American Review*, pp.449-472 (reprinted in Peirce [1958], vol. VIII, chapter 2.

Peirce C.S. 1931-1958, *Collected Papers of C.S. Peirce*, VIII vol.s ed. by A.W. Burks, Harvard U.P., Cambridge.

Peirce C.S. 1986-, *Writings of C.S. Peirce*, Indiana U.P., Bloomington.

Pembroke S.G. 1971, "Oikeiosis", in Long A.A. (ed.) *Problems of Stoicism*, University of London, The Athlone Press,London, pp.114-149.

Peters F.E. 1967, *Greek Philosophical Terms*, New York U.P., New York.

Plato, *Meno*, Eng. and Greeek, ed. and tr. by Shaples R.W., Aris & Phillips Warminster, Bolchary-Carducci, Chicago, 1985.

Plato, *Republic*, Jowett B. and Campbell L. (ed.s), Clarendon Press, Oxford, 1961.

Plato, *Theetetus*, ed. and tr. by McDowell J., Clarendon Press, Oxford, 1973.

Pollock J. 1880, *Spinoza - his life and philosophy*, Kegan Paul, London.

Post J.F. 1965, "Does Knowing make a difference to what is known ?", *The Philosophical Quarterly*, (15), pp.220-8.

Priest S. 1987a, "Subjectivity and Objectivity", in Priest [1987b], chap. 5.

Priest S. 1987b, *Hegel's Critique of Kant*, Clarendon Press, Oxford.

Prior M. 1971, "To the Honourable Charles Montague", in Wright H.B. and Spears M.K. (ed.s) *The Literary Works of M.P.*, Clarendon, Oxford, (first published 1692).

Putnam H. 1976, What is "Realism" ?, *Proceedings of the Aristotelian Society*, pp.177-94.

Putnam H. 1981, *Reason, Truth and History*, Cambridge U.P., Cambridge.

Putnam H. 1982, "Why there isn't a Ready-made World", *Synthese* (51), pp.141-167.

Putnam H. 1987, *The Many Faces of Realism*, Open Court, LaSalle, Illinois.

Reeves C. 1976, "Was Freud a Scientist ?" *The Listener*, 15 January.

Reilly F.E. 1970, *Charles Peirce's Theory of Scientific Method*, Frodham U.P., New York.

Rescher N. 1974, "Noumenal Causality", in Beck [1974], pp.175-183.

Riley B.G. 1968, "Existence, reality and Objects of Knowledge", *Transactions of the C.S. Peirce Society*, (IV,1).

Rorty R. 1980, *Philosophy and the Mirror of Nature*, Blackwell, Oxford.

Rorty R. 1982, *Consequences of Pragmatism*, Harvester, Brighton.

Ross W.D. (ed.) 1960, *The Works of Aristotle*, Clarendon Press, Oxford, see also Barnes [1984].

Ross W.D. (ed.), 1958, *Aristotle's Metaphysics*, a revised Greek text with introduction and commentary, Clarendon Press, Oxford.

Rossi A. 1974, "Immediatezza della Conoscenza Sensitiva ed Intellettiva, o Scetticismo, Relativismo e Agnosticismo" ("Immediacy of Sensible and Intellectual Knowledge, or Scepticism, Relativism and Agnosticism") in "Tommaso d'Aquino nel suo Settimo Centenario", *Atti del Congresso Internazionale*, 1974 (Roma-Napoli), Edizioni Domenicane Italiane, Napoli, vol.6, pp.388-400.

Rudolph K. 1983, *Gnosis, The Nature and History of Gnosticism*, R. MacLachlan Wilson (tr. and ed.), Harper and Row, New York (first published [1977]).

Ruse M. 1986, *Taking Darwin Seriously, A Naturalistic Approach to Philosophy*, Basil Blackwell, Oxford.

Schofield M., Burnyeat M. and J. Barnes (ed.s) 1980, *Doubt and Dogmatism - Studies in Hellenistic Epistemology*, Clarendon Press, Oxford.

Scruton R. and Wright C. 1976, "Truth Conditions and Criteria", *Aristotelian Society sup.vol.* (50), pp.193-216; 217-245.

Sedley D. 1980, "The Protagonists" in Schofield et al. [1980].

Sedley D. 1983, *The Motivation of Greek Skepticism*, in Burnyeat [1983], pp.9-29.

Sellars W. 1963, *Science, Perception and Reality*, Humanities Press, New York.

Sellars W. 1968, *Science and Metaphysics*, Routledge and Kegan Paul, London.

Sextus Empiricus 1985, *Selections from the Major Writings on Scepticism, Man and God*, Hallie P.P. (int. & ed.), Etheridge S.G. (tr.) Morrison D.R. (foreword and bib.), Hackett, Indianapolis, Indiana.

Snell B. 1953, *The Discovery of the Mind - The Greek Origins of European Thought*, Harvard U.P., Cambridge Mass..

Sorell T. 1986, *Hobbes*, Routledge and Kegan Paul, London.

Sosa E. (ed.) 1987, *Essays on the Philosophy of George Berkeley*, Reidel, Dordrecht.

Spedding J., Ellis R.L., Heath D.D. (ed.s), 1858-74, *The Works of Francis Bacon*, 14 vol.s, Longmans, London.

Sloterdijk P. 1988, *Critique of Cynical Reason*, Elaren M. (tr.), Verso, London.

Spinoza B. 1913, *Ethica Ordine Geometrico Demonstrata*, in *Benedicti de Spinoza Opera Quotquot Reperta Sunt*, Van Vloten J. and Land J.P.N. (ed.s), Martinum Nijhoff, Hagae Comitum vol.I, pp.35-273, (Latin edition, first published in 1677).

Spinoza B. 1925, *Opera*, C. Gebhardt (hrsg.), Im Auftrag der Heidelber Akademie der Wissenshaften, Heidelber.

Spinoza B. 1951, *The Ethics*, in *The Chief Works of B.S.*, Elwes R.H.M. (tr. and intr.), Dover Publ., New York vol.II, pp.45-271 (first published in 1677).

Spinoza B., *Principia Philosophiae Cartesianae* and *Cogitata Metaphysica*, in Spinoza [1925] (first published in 1663) and in Curley E. (ed.) *The Collected Works of Spinoza*, Princeton U.P., Princeton, New Jersey, vol.1, pp.221-346.

Stanley R. 1969, "A Central Ambiguity in Descartes", in *Cartesian Essays*, Magnus B. Wilburn J.B. (ed.s), The Hague, Nijhoff, pp.17-35.

Steadman J.M. 1971, "Beyond Hercules: Bacon and the Scientist as a Hero", in *Studies in the Literary Imagination*, vol. IV, "The Legacy of F. Bacon", pp. 3-47, Georgia State University Publisher, Georgia.

Strawson P.F. 1966, *The Bounds of Sense*, Meuthen, London.

Strawson P.F. 1976/77, "Scruton and Wright on Anti-realism etc.", *Proceedings of the Aristotelian Society* (82), pp.15-21.

Strawson P.F. 1979, "Perception and Its Objects", in MacDonald [1979].

Strawson P.F. 1985, *Skepticism and Naturalism, Some Varieties*, Methuen, London.

Stroud B. 1984, *The Significance of Philosophical Scepticism*, Clarendon, Oxford.

Telesius B. 1971, *De Rerum Naturae*, Hildesheim (repr.), Naples, (first pub. 1586).

Thomas Aquinas, *In Metaphysicam Aristotelis Commentaria*, Officina Libraria Marietti, 1820, Torino.

Thomas Aquinas, *Quaestiones Disputatae de Potentia*, Mandonnet P. and Lethielleux (ed.s), 3 vols., 1925, Paris.

Trinkaus C. 1973, "Renaissance Idea of the Dignity of Man", in Wiener [1973], vol. IV, pp.136-147.

Vaihinger H. 1965, *The Philosophy of "As If", A system of the Theoretical, Practical and Religious Fictions of Mankind*, Ogden C.K. (tr.) (firt edited in 1935).

Van Steenberghen F. 1970, *Epistemology*, (tr. from the fourth French edit. by L. Moonan), J.F. Wagner Inc., New York.

Vico G.B., *De Antiquissima Italorum Sapientia*, (in English) Palmer L.M. (tr. and ed.), Cornell U.P., 1988, London.

Von Arnim J. (ed.), 1903, *Stoicorum Veterum Fragmenta*, 4 vol.s, Leipzig, republished in [1964].

Voss H.G. and Keller H. 1983, *Curiosity and Exploration, Theories and Results*, Academic Press, London (first published in German in 1976).

Wallace K.R. 1967, *Francis Bacon on the Nature of Man*, University of Illinois Press, Urbana.

Watts P.M. 1982, *Nicolaus Cusanus, A Fifteenth-Century Vision of Man*, Brill, Leidel.

Wedin M.V. 1988, *Mind and Imagination in Aristotle*, Yale U.P. New Haven.

Weisheipl J.A. 1982, "The Interpretation of Aristotle's Physics and the Science of Motion", in Kretzmann N. et al. [1982]

Wennerberg H. 1962, *The Pragmatism of C.S. Peirce - An Analytical Study*, Ejwar Munksgaard, Copenhagen.

Whitehead A.N., Russell B. 1910, *Principia Mathematica*, Cambridge U. P., Cambridge.

Wieland G. 1982, "Happiness; the Perfection of Man", in Kretzmann N. et al. [1982], pp.673-686.

Wiener P.P (ed.) 1973, *Dictionary of the History of Ideas*, C.Scribner's Sons, New York.

Willey B. 1953, *The Seventh-Century Background*, New York.

Wolfson H.A. 1934, *The Philosophy of Spinoza*, 2 vols., Meridian Books, The World Pub.Comp., New York.

Wolman B.B. (ed.) 1973, *Dictionary of Behavioural Sciences*, Van Nostrand Reinhold Comp., New York.

Zeller E. 1962, *The Stoics the Epicureans and the Sceptics*, Russell and Russell, New York.

Appendix I

Although I have tried to follow the seven rules given by Peirce for an Ethics of Terminology [2.219-2.226] I'm afraid that the reading may not be very easy because of the various technical devices. I list here the principal abbreviations, technical expressions, definitions, formulas, and translations used in the work.

Acknowledgment: any "technologically non-productive" epistemic or doxastic operations of a HKS.

An-question: whether or not there is an external reality.

AP: see Aristotelian Postulate.

Aristotelian Postulate: see AP, D_{21}, D_{22}, D_{23}, D_{24}, D_{25}, D_{27} and AGS, T_C, T_1/T_8, T_L, T_L.

CC: see Closure Clause.

Epistemological Realism: Philosophical realism concerning the value of human objective knowledge as defined in D_3, D_9, D_{12}, A, C.

Epistemophilia: see *Vis Cognoscitiva* and D_{25}, D_{26}, D_{27}.

ER: External Reality.

General objective knowledge: any form of public, potentially propositional knowledge that, liable of some consideration concerning its values of truth and that can be supported by some logical argument.

Historical or artificial (reality): resulting from the presence of the animal *homo sapiens* on the earth.

HKS: Human Knowing Subject.

Ingenuous Realism: see D_{12} D_{13}.

Knowledge$_{result}$: knowledge as the result of the process of knowing; see R-knowledge, Process of knowing and D_8, D_9, D_{14}, D_{31}.

M: Mind.

Natural (reality): "belonging to the physical world" in a non technical sense of physical.

Ontological Realism: Philosophical realism concerning the existence of the physical world, see D_1 D_2, $D_{2.1}$, $D_{2.2}$, $D_{2.3}$, D_4, D_4^*, D_5, $D_{5.1}$, $D_{5.2}$, $D_{5.3}$ and D_6, D_{12}, D_{18}, A, B.

Boethius Paradox: see P.

PP: Peirceish Postulate.

P.C.R.: see Perpetual Check of Reason.

Peirceish Postulate: see D_{29}, D_{30}, D_{31}.

Perpetual Check of Reason: the logical reconstruction of the contents of the Traumatic Doubt, (Anti-$R_{ep.}$ + minimal $R_{ont.}$).

P-knowing: see Process of knowing.

Process of knowing: the process of knowing consists of a symmetric epistemic relation (R_e) occurring between an ideal Human Knowing Subject and External Reality; the occurrence of the process of knowing produces a certain result called R-knowledge, see D_7.

Quomodo-question: if there is an external reality, what sort of existence it has.

R_e: Epistemic Relation, see Process of knowing and D_7 and D_{15}.

$R_{ep.}$: see Epistemological Realism.

R-knowledge: knowledge as the result of the process of knowing, see knowledge$_{result}$, Process of knowing and D_8, D_9, D_{14}, D_{31}.

$R_{in.}$: Ingenuous Realism.

R_{oi}: Ontological Independence, see $D_{2.3}$.

$R_{ont.}$: see Ontological Realism.

TD: see Traumatic Doubt.

Traumatic Doubt: "Reality in itself may be completely different from what we take it to be".

Vis cognoscitiva: see D_{25}.

Wissbegier: see Vis Cognoscitiva.

* * *

D_1) Philosophical realism concerning the existence of the physical world $=_{def.}$ the philosophical position according to which there is an external reality and its nature (i.e. existence and properties) is *mind-independent*.

D_2) $R_{ont.}$ $=_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) a portion (greater than null, but not necessarily equal to all) of ER enjoys a *mind-independent* nature (i.e. existence and properties).

$D_{2.1}$) D_2-(i); and (ii) a portion (greater than null, but not necessarily equal to all) of ER has a nature (i.e. existence and properties) that it is not affected by the presence or absence of a mind (M).

$D_{2.2}$) D_2-(i); and (ii) a portion of ER has a nature (i.e. the existence and properties) that is ontologically independent of M.

$D_{2.3}$) D_2-(i); and (ii) [R_{oi} (ER,M)].

D_3) Philosophical realism concerning the value of human knowledge $=_{def.}$ the philosophical position according to which a (normal) human knowing subject (in the best case) has a perfect objective knowledge of the intrinsic nature (i.e. the intrinsic existence and intrinsic properties) of external reality.

D_4) $R_{ont.}$ $=_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) a portion (greater than null, but not necessarily equal to all) of ER enjoys a minds-independent nature (i.e. existence and properties);

D_5) $R_{ont.}$ $=_{def.}$ the philosophical position according to which (i); and (ii) a portion (different from nothing, but not necessarily equal to all) of ER is such that its nature (i.e. existence and properties)
$D_{5.1}$) would be the same even if there weren't human beings within it;
$D_{5.2}$) would be the same even if human beings were completely different from what they are now;
$D_{5.3}$) wouldn't be affected by the disappearance of human beings.

D_6) $R_{ont.}$ $=_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) a portion (greater than null, but not necessarily equal to all) of ER has a nature (i.e. existence and properties) independent of human acknowledgment.

CC) the same portion of ER selected by (ii) in D_6 is such that if its temporal nature (i.e. its existence and properties) can partially depend on some ulterior factor, it can only depend on a previous human physical activity or human technologically-productive knowledge.

D_7) {[R_e (HKS,ER)] $=_{def.}$ process of knowing} $=_{def.}$ P-knowing.

D_8) [Knowledge$_{result}$] $=_{def.}$ R-knowledge.

D_9) $R_{ep.}$ $=def.$ the philosophical position according to which the process of knowing is such as to make possible the production of HKS' perfect objective R-knowledge of the intrinsic nature (i.e. the intrinsic existence and intrinsic properties) of ER.

D_{10}) (Ontological Anti-realism $=_{def.}$ non-$R_{ont.}$) $=_{def.}$ Anti-$R_{ont.}$.

D_{11}) (Epistemological Anti-realism $=_{def.}$ non-$R_{ep.}$) $=_{def.}$ Anti-$R_{ep.}$

D_{12}) [$R_{ont.}$ + $R_{ep.}$] $=_{def.}$ Ingenuous Realism $=_{def.}$ $R_{in.}$

D_{13}) $R_{in.}$ $=_{def.}$ the philosophical position according to which (i) there is an external reality ER; and (ii) the intrinsic nature (i.e. existence and properties) of ER, both in its historical and in its natural aspects, is on the ontological side completely independent of HKS' acknowledgment and on the epistemological side perfectly knowable by HKS, thanks to the nature of the process of knowing.

D_{14}) Anti-$R_{ep.}$ $=_{def.}$ the philosophical position according to which the process of knowing is not such as to make possible the production of HKS' perfect objective R-knowledge of the intrinsic nature (i.e. the intrinsic existence and intrinsic properties) of ER

D_{15}) Anti-$R_{ep.}$ $=_{def.}$ the philosophical position according to which (i) human cognitive processes (i.e. the subjective *conditio sine qua non* for there being something an epistemic relation between HKS and ER) are such as to make possible only a *modifying epistemological relation* R_e between HKS and ER; and (ii) R_e, in turn, is such as never to enable HKS to come to grasp epistemologically the intrinsic nature of ER; R_e can provide HKS only with a grasp of ER as this is according to HKS' epistemic perspective.
D_{16}) ER with its intrinsic existence and intrinsic properties $=_{def.}$ ER as it is *in itself* (or *in se* or *an sich*) $=_{def.}$ *Noumenal* ER $=_{def.}$ ER^n.

D_{17}) ER as it is known by HKS $=_{def.}$ ER as it is for HKS $=_{def.}$ Phenomenal ER $=def.$ ER^P

D_{18}) $R_{ont.}$ $=_{def.}$ the philosophical position according to which (i) there is an external reality, ER; (ii) the portion of ER which enjoys an intrinsic nature (i.e. intrinsic existence and intrinsic properties) independent of human acknowledgment is only conceivable as existent, but it is not knowable (ER^n); (iii) the portion of ER which is knowable is merely phenomenal and in a significant degree its nature depends on the subjective conditio sine qua non of the P-knowing (ER^P); and (iv) it is impossible to estimate how different the nature of ER^P is from the nature of ER^n.

D_{19}) "eidenai x" $=_{def.}$ "epistasthai x" $=_{def.}$ "to have episteme of x".

D_{20}) "eidenai x" $=_{def.}$ "to know-why x".

D_{21}) episteme $=_{def.}$ theoretical, rational knowledge $=_{def.}$ objective knowledge.

D_{22}) in the same way as "eidenai x" $=_{def.}$ "to have episteme of x" so "to know-why x" $=_{def.}$ "to have objective knowledge-why of x".

D_{23}) the Aristotelian Postulate (AP) holds that: "all men have a spontaneous conation which drives them towards the acquisition of objective knowledge-why of the intrinsic nature of what cannot be otherwise".

D_{24}) (A post-Cartesian version of) the Aristotelian Postulate (AP) holds that: "all men have a spontaneous conation which drives them towards the acquisition of objective knowledge-why of the intrinsic nature of external reality".

D_{25}) Vis cognoscitiva (or Epistemophilia as Wissbegier) $=_{def.}$ a spontaneous, inborn impulse to pursue knowledge for its own sake.

D_{26}) The epistemophilic impulse $=_{def.}$ an involuntary tendency, understandable in terms of state of mind, i.e. in terms of mentally internal tendency, which exerts an incitement upon the mind itself to pursue knowledge, without premeditation or reflection.

D_{27}) (A post-Cartesian version of) the Aristotelian Postulate (AP) holds that: "all men have a spontaneous, inborn epistemophilic impulse (conatus) that drives them towards the acquisition of objective knowledge-why of the intrinsic nature of external reality".

D_{28}) For every A if A has among his property that of being E then he is also a HB, otherwise is just an A.

D_{29}) The Peirceish Postulate (the PP) holds that: "man has a spontaneous, inborn and inertial, mental conatus that makes him persevere in his own state of intellectual nescience, unless he is compelled to change that state of mental rest by some external forces impressed upon his mind".

D_{30}) A post-Cartesian version of the Peirceish Postulate (the PP) holds that: "man has a spontaneous, inborn and inertial, mental conatus that would make him persevere in his own static state of nescient ataraxia, unless he is compelled to change that state by some external force impressed upon his mind. Such a conatus is the conservative force that

activates the process of knowing at the intellectual level. It makes the human mind react against the ontological pressure coming from the contrasting presence of external reality. Its goal is the restoration of a homeostatic, peaceful state of ataraxia, by means of the production of R-knowledge.

D_{31}) A post-Cartesian version of the Peirceish Postulate (the PP) holds that: "each person has a spontaneous, inborn and inertial, *mental conatus* that would make her persevere in her own static state of *nescient* ataraxia, unless she is compelled to change that state by some external force impressed upon her mind. Such a conatus is the conservative force that activates the process of knowing at the intellectual level. It makes the human mind react against the pressure coming from the contrasting presence of physical and cultural realities. Its goal is the restoration of a homeostatic, peaceful state of ataraxia, by means of the production of R-knowledge".

AJ) as a matter of fact, man enjoys (i) sensations for their own sake and (ii) purely intellectual activities for their own sakes. Since (i) and (ii) are signs of the presence a *vis cognoscitiva* in the human mind, then there is a tension (*vis cognoscitiva*) in the human mind that renders man a knowledge-why-seeker. An appeal to such a tension explains the other human phenomenon of a never-ending search for knwoledge.

AR) "knowing" is a process; as such it entails the modification of something, the knower, which through the process of knowing moves from a state of ignorance to a state of cognisance, which in turn is the natural state more suitable for the man-philosopher. But if knowing is a way of moving either towards the known or simply towards knowledge, then it must be due to some sort of driving force. This later is identifiable in the *vis cognoscitiva*, which is both a spontaneous and a natural tendency of reaching intellectual knowledge and a sort of unmoved mover of the cognitive processes.

AS_T) one of the reason that causes the TD is the assumption of the AP; but since it is reasonable to assume that (i) men generally do not not care about knowledge of the intrinsic nature of eternal reality just for its own sake, it follows that (ii) the assumption of the AP is not justified; and the abandonment of the AP implies that (iii) the possibility that reality in itself may be completely different from what men take it to be (i.e. the TD) is not felt as a real problem by men, and hence that the TD is solved as not being a real problem for men.

P) most of the time the great majority of men do not actually satisfy the *conditio sine qua non* (i.e. having the property E) for being considered *more than animals* (A).

* * *

{$[R_e$ (HKS,ER)] produces [knowledge$_{result}$]}: P-knowing produces R-knowledge; see D_7 and D_8.

A) $R_{ont.}$ + $R_{ep.}$ = the most general form of *naive* or *metaphysical* or *dogmatic* realism.
B) $R_{ont.}$ + Anti-$R_{ep.}$ = a general version of *Kantian realism.*
C) Anti-$R_{ont.}$ + $R_{ep.}$ = interpretable as *Berkeley's anti-realism* ("anti-materialism" or "subjective idealism").
D) Anti-$R_{ont.}$ + Anti-$R_{ep.}$ = a radical *sceptical position,* such as that resulting from the Cartesian-Demon hypothesis.
AGS) "pantes anthropoi tou eidenai oregontai phusei"

T_C) "all men by nature desire to know"

T_1) "all men by nature desire *to understand*"

T_2) "all men by nature desire *to know-why*"

T_3) "all men by nature desire *to have objective knowledge-why*"

T_4) "all men by nature (*phusei*) desire (*oregontai*) to have objective knowledge-why of what cannot be otherwise"

T_5) "all men by nature (*phusei*) have a conation which push them towards the possession of objective knowledge-why of what cannot be otherwise"

T_6) "owing to the harmonious nature of the universe, all men have a satisfiable conation which push them towards the possession of objective knowledge-why of what cannot be otherwise"

T_L) "Omnes homines natura scire desiderant"

T_7) "(owing to the harmonious nature of the universe) all men have a (spontaneous and satisfiable) conation which push them towards the possession of objective knowledge-why of what cannot be otherwise"

T_8) "(owing to the harmonious nature of the universe) all men have a (spontaneous and satisfiable) conation which push them towards the possession of objective knowledge-why of the intrinsic nature of what cannot be otherwise".

APPENDIX II

The are many aspects of Peirce's philosophy which cannot be easily reconciliated with the picture I've endorsed in the thesis:

i) a behaviouristic approach to the dialectic of doubt/belief ("the essence of belief is the establishment of a habit; and different beliefs are distinguished by the different modes of action to which tehy give rise [5.398]"), in contrast with my more metaphysical or mentalistic approach[1];
ii) an acceptance of the AP that sometimes emerges in his conception of scientific knowledge (1.43-5; 1.55; 1.235; 1.636-648; 3.34; 6.428)[2];
iii) the refusal of any form of dualism, either Cartesian or Kantian, in favour of a more harmonious vision of reality and man (cf. what he says about Aristotle's concept of *energeia* and the harmony between active and passive roles of HKS and reality in 1.325), in contrast with my appreciation of dùalism; and more specifically
iv) the denial of any value to the Kantian concept of a noumenal unknowable reality (cf. 1.405 and 5.311 where he says "There is nothing then, to prevent our knowing outward things as they really are");
v) the acceptance of a more classic and medieval vision of reality as dead-mind in the sense of "mind-like" (cf. 6.102-8). In the text I used the expression "dead-mind" with the opposite sense of "what is in itself a negation of the mental". According to Peirce, "nature syllogizes from one major premise" (6.66) and it is pervaded by thought (4.551 and 4.553, n.2; see also end of 1.351). About this aspect he argues in a way very close to that Lear when he explains the nature of Aristotle's metaphysics ("It seems incontastable that the mind of man is strongly adapted to the comprehension of the world; at least, so far as this goes, that certain conceptions, highly important for such a comprehension, *naturally* [my italics, cf. Aristotle's *phusei*] arise in his mind; and without such a tendency, the mind could never have had any development at all" [6.417]. Cf. also 5.591 and 5.493 for the inter-action between internal and external world.)[3];
vi) his partial disapproval of the unconscious mental state of ignorance as equivalent to a "death of thought" (cf. Box IB2-II (22) sheet C, quoted by Wennerberg [1962], p.60).

However, about each single point it wouldn't be difficult to find Peirce expressing positions closer to that exposed in the thesis (where more indications about passages in Peirce's work have been given):
a) about (i) cf. Peirce's metaphysical interpretation of the dialectic between Ego and Non-Ego and the relevance of the homeostatic model for a behaviouristic approach;
b) about (ii) cf. his theory of perception;
c) about (iii) cf. his theory of "Struggle" and of Ego-Non Ego [for example in 5.45-58], of a dualism occurring between knower and known [5.539] and the acceptance of the PP as far as empirical knowledge is concerned. The main difficulty seems that Peirce didn't compound the ideal of a desire for knowledge with the cynical view of man's desire for peace of mind. This is very clear for exampe from the different understandings he has of the

---

1) Cf. Almeder [1980], pp.1-13, but see p. 12, note 23, on Ayer's mentalistic interpretation.
2) Cf. Reilly [1970], chapter II entitled 'The Scientist's concern: Knowledge for its own sake".
3) The problem of Peire's commitment to a version of realism and of idealism has been largelly discussed, I'm afraid largelly applying this couple of term in a rather post-Cartesian sense. See Almeder [1980], chap. IV. Although I haven't seen the article, from what Almeder says in ·note 24 I believe my interpretation of Peirce is much closer to that of Riley [1968] than to his own.

concept "conservatorism" [cf. for example 1.50 and 1.148]. So that Peirce can still appreciate an Aristotelian vision of man despite his homeostatic interpretation of the relation between doubts and beliefs. This is rather clear in chapter 5 vol I;

d) about (iv) cf. his Kantian background and his distinction between first impressions of sense percepts and perceptual facts[4];and

e) about (v) cf. his concept of polarity (cf Feibleman [1970] pp.245-6) and of opposition (cf. 1.457);

f) his appreciation of conscious mental states of ignorance, as the "birth-stage of thought" (c. Wennerber, [1962]).

A further difficulty is that when Peirce speaks of knowledge in terms of action/reaction he refuses to accept a neat distinction between the two roles of acting and reacting plaied by the knower and reality (cf. 5.46 and 1.334 quoted in VI.6, note 79). When he speaks in terms of firstness, secondness etc. he applies reaction to reality and action to man [cf. 7.531-4], but when he speaks of the psychology of belief and doubt, it is reality which acts and man who reacts [7.369 and 437-43]. So that there seem to be two levels (but cf. 1.431): one is the relation action-reaction and the other is the relation doubt-belief. The former serves to accept ontological realism, the latter to accept rational behaviour in respect to the autonomy of the external world [cf. 7.313-345]. I believe that all this is in agreement with Peirce's anti-Cartesian vision of the harmonic relation between reality and man.

What follows is a list of some other passages connected with the general hypothesis sustained in this thesis:

VOLUME I

24 brute reality;
212 compulsion *hic et nunc*;
321 internal and external world;
322-324 struggle and action/reaction;
332-4-6 shock;
419 brutal facts;
457 to say that a table exists is to say that it produces certain effects upon us;
457-8 opposition;
460; 329 reaction;
611-15 the aim of reasoning is a state of rest.

VOLUME II

28/29 the process of thinking starts presumably at the level of acquisition of perpcepts and is not knowable;
29 truth is compulsory (maybe in the same way as external reality ?);
47/50 compulsion and subconscious;
84; 138/39 the concept of force;
113 wishful believing;
140/141 pre-thought perception as unknowable;
140/142 compulsion to know;
146 on the nature of pre-cognitive perception;
160 there is probably no special instinct for rationality as there is for morality;
179/185 unconscious, reasoning and logical justification;
336 compusion *hic et nunc*;
763 the end of man (end of p.487);

4) Cf. Feibleman [1970], chap. II, pp.32-46, 'The Stimulus of Kant'.

773 subconscious.

VOLUME III

154-61 the process of knowing as action and reaction; "stimulation and irritation".

VOLUME IV

64 the state of practically perfect belief;
157 inner/outer world, adaptation of mind.

VOLUME V

250; 283 whether we can think without signs
310 and ff. the incognizable is inconceivable;
549-573 Truth as correspondence;
582-3 the Will to learn.

VOLUME VI

95 knowledge of things in themselves;
414-8 mind and nature.

VOLUME VII

58 scientific knowledge for its own sake and Gnostic Instinct;
186 on the distinction between science and beliefs
190 it is evolution (phusis) that has provided us with emotion [emotion of surprise];
269 the growth of science occurs through the breakening of habits;
326 every inquiry presupposes a passage from doubt to belief; the relation between sensation and doubt;
335 observations are the result of the action upon the mind of outward things;
369 matter acts upon mind and mind responsively acts upon matter;
381 the supervenince of mind;
531-4 action and reaction (where reality is reacting against man);
541,note 9 reacting against the outer world.
604-606 belief has nothing to do with science;

VOLUME VIII

78 on cognition and dynamics;
103 brute action; knowledge and compulsion;
138 list of different possible aims;
251 faith, belief an reason to be careful in making up our minds;
315 action passion and dynamics;
317/318 dead matter;
330 experience generally is what the course of life has compelled me to think.