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DESCARTES, HUSSERL AND RADICAL CONVERSION

Paul S. MacDonald

Phenomenology has been one of the most influential and far-reaching developments in 20th Century Philosophy and has had a great impact on the disciplines of philosophy of logic and math, theory of knowledge, and theory of meaning. The most profound influence on Edmund Husserl (1859 - 1938), the founder of phenomenology, was Rene Descartes (1596 - 1650), whose radical rethinking of philosophy's overall project provided Husserl with both the historical and conceptual point of departure for his foundation of *prima philosophia*. Despite this explicit and well-known influence, there is no book-length study of their thematic parallels; numerous journal articles focus almost entirely on the phenomenological reduction and, aside from this, are fairly unsatisfactory. The purpose of the present work is to elucidate systematic convergences (and divergences) between Descartes and Husserl throughout their respective philosophical developments. This comprises explication of several central topics: 1. The parallel between 17th C. skepticism, which Descartes attempted to overthrow, and 19th C. psychologism and relativism, which Husserl reacted against. 2. The striking similarity at the level of formal ontology between Descartes' simple and complex natures and Husserl's part-whole theory. 3. A clarification of the Cartesian sense of methodical doubt and how Husserl's *mistaking* of this shaped the initial formulation of the reduction. 4. Convergence in the maturation of the primitive notion of intuition as "clear and distinct seeing" and "seeing of essences" for both thinkers. 5. An analysis of the modes of methodical doubt, in terms of steps in the cognitive act of doubting, and not merely in the content of that which is doubted. 6. Far-reaching divergences in that Descartes was motivated to establish with scientific certainty an entirely new world of being, whereas Husserl was concerned to disclose an entirely new sense of the world. As such, thematic convergences between Descartes and Husserl are not due to accidental intersections of interest, nor are they curiosities of the comparative method in historical research. These parallels are intrinsic and systematic due to an overarching congruence in their visions of the starting point, methodological procedures, and reaction to pseudo-scientific matters-of-fact in the founding of a genuine philosophical project.

**DESCARTES, HUSSERL AND
RADICAL CONVERSION**

Paul S. MacDonald

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ABBREVIATIONS

Editions of Descartes' Works:

- CSM. I, II. *The Philosophical Writings of Descartes*. two vols. trans. by John Cottingham, R. Stoothoff & D. Murdoch. Cambridge Univ. Press, 1984-85.
- CSM. III. *The Correspondence of Descartes*. trans. by above; includes A. Kenny's *Descartes' Philosophical Letters*. [Oxford Univ. Press, 1970] Cambridge Univ. Press, 1991.
- AT *Oeuvres de Descartes*. par Charles Adam & Paul Tannery. new ed. 12 vols. Paris, 1964-76.

Editions of Husserl's Works:

- CM *Cartesian Meditations*. trans. by Dorion Cairns. The Hague: Nijhoff, 1973.
- Crisis *The Crisis of European Sciences and Transcendental Phenomenology*. trans. by David Carr. Northwestern Univ. Press, 1970.
- Early *Early Writings in the Philosophy of Logic and Mathematics*. trans. by Dallas Willard. Kluwer Academic, 1993.
- EJ *Experience and Judgment*. Rev. & ed. by Ludwig Landgrebe. trans. by J. S. Churchill & Karl Ameriks. Northwestern Univ. Press, 1973.
- FTL *Formal and Transcendental Logic*. trans. by Dorion Cairns. The Hague: Nijhoff, 1969.
- HSW *Husserl: Shorter Works*. ed. by Peter McCormick & F. A. Elliston. Univ. Notre Dame, 1982.
- Ideas I *Ideas First Book: General Introduction to a Pure Phenomenology*. trans. by Fred Kersten. The Hague: Nijhoff, 1982.
- Ideas II *Ideas Second Book: Studies in the Phenomenology of Constitution*. trans. by R. Rojcewicz & A. Schuwer. The Hague: Nijhoff, 1989.
- Ideas III *Ideas Third Book: Phenomenology and the Foundations of the Sciences*. trans. by T. E. Klein & W. E. Pohl. The Hague: Nijhoff, 1980.
- IP *The Idea of Phenomenology*. trans. by W. P. Alston & G. Nakhnikian. The Hague, 1964.
- LI *Logical Investigations*. two vols. trans. by J. N. Findlay. Routledge, 1970.
- PP *Phenomenological Psychology*. trans. by J. Scanlon. The Hague: Nijhoff, 1977.
- PL *The Paris Lectures*. trans. by Peter Kostenbaum. The Hague: Nijhoff, 1967.
- Time *The Phenomenology of the Consciousness of Internal Time*. trans. by J. B. Brough. Kluwer Academic, 1991.
- HUS *Husserliana: Gesammelte Werke*. ed. by W. Biemel, M. Biemel et al. The Hague, 1950-95 vols. I - XXIX.

The closeness of the network of which this nexus [within the *Meditations*] is constructed, and the extreme polyvalence that results from each of its elements, imparts to the Cartesian text a unique density and intensity. Leibniz had likened God to a savant author who puts the most matter in the least volume. The comparison can be redirected, and the Descartes of the *Meditations* can be assimilated, for philosophy, to a Leibnizian God.... From the small, dense and laconic book of the *Meditations*, which has often been ill understood, in spite - if not because - of the accumulation of commentaries, has flowed the rivers of modern philosophy. When a book is that rich, it suffices for us to glimpse only a small part of its riches, in order for it to manifest an infinite wealth.

Martial Gueroult

The understanding of the beginnings is to be gained fully only by starting with science as given in its present-day form, looking back at its development. But in the absence of an understanding of the beginnings, the development is mute as a development of meaning. Thus we have no other choice than to proceed forward and backward in a *zig-zag pattern*: the one must help the other in an interplay. Relative clarification on one side brings some elucidation on the other, which in turn casts light back on the former. In this sort of historical consideration and critique, then, which begins with Galileo (and immediately afterwards with Descartes) and must follow the temporal order, we nevertheless have constantly to make *historical leaps* which are thus not digressions but necessities.

Edmund Husserl

CHAPTER I

INTRODUCTION: CONVERGENCE AND DIVERGENCE

Few thinkers in the 20th Century have had such a profound influence on philosophy and related disciplines as Edmund Husserl (1859 -1938). Through his work and teaching, he has shaped many of the areas of inquiry and tools for analysis which today occupy prime places in the philosophy curriculum. It is relatively uncontentious to observe, as several recent writers have done, that a list of his students and their students reads like a who's who of 20th century continental philosophy. Husserl's prodigious influence extended far beyond the scope of standard philosophical research and motivated groundbreaking reorientations in a variety of endeavours. His lectures, writings and personal contacts had a critical impact on Gestalt Psychology, Structural Linguistics, the French 'New' Anthropology, and Existentialist Literature, amongst others. The single figure to whom Husserl accords unreserved respect, to whom he returns again and again over a thirty year period is Rene Descartes. This unusual admiration and its repercussions has been much commented upon; it is so well known that it has inspired a dozen articles and book-chapters, and then... silence. What more is there to say after Paul Ricoeur's authoritative study of Husserl's *Cartesian Meditations*, first published in 1954¹, or Jan Patočka's brilliant piece "Cartesianism and Phenomenology"² John Burkey and Walter Soffer have both recently highlighted the significance of Husserl's characterisation of some 19th C. Psychology as a disguised skepticism³, but without extending this insight to show the topic's congruence with Descartes' background problems.

¹ Paul Ricoeur. *Husserl: An Analysis of his Phenomenology*. Trans. by Edward G. Ballard & Lester E. Embree. Northwestern Univ. Press, 1967. Chap. 4.

² Jan Patočka. *Selected Writings*. Ed. & trans. by Erazim Kohak. Univ. Chicago Press, 1989. Pp. 285-325.

³ John Burkey. "Descartes, Skepticism and Husserl", in *Husserl Studies*. vol. 7, 1990; Walter Soffer. "Husserl's Neo-Cartesianism", in *Research in Phen.* vol. 11, 1981.

Perhaps more can be said on Descartes' inspiration of an original thinker by paying attention to those areas in Husserl's work where there is no reference to Descartes.

If the western philosophical tradition can be thought of as a 2000 year old conversation, then some voices have gone silent, some are louder and more strident, others are not only pre-emptive but are backed with a chorus of approval. How does one *begin* to philosophize? How does one enter this conversation where most of the parts seem to be already taken? One way to begin is to acquiesce to the current issue and terms of discourse, and then to make a contribution, a positive addition to the general forward movement. Another way is to announce that the subject matter and vocabulary, the standard moves in the philosophical 'game', are no longer acceptable and that it is time to start a new discourse. Both Descartes and Husserl repeatedly call for a complete demolition of previous philosophical achievements and a return to the beginnings in order to better determine what counts as an intelligent conversation. Pierre Thevanetz' extraordinary article on "The Question of the Radical Point of Departure" provides an insight into the meaning of *beginning* in the philosophical sense for these two thinkers⁴. If one defines philosophy as the search for what is first, this first has two senses, two dimensions into which it opens. It is either a non-temporal *arche* or *proton*, whose priority is logical or ontological, i.e. it is a science of principles; or it is a temporal *arche* whose priority is chronological, i.e. a science of the beginning, concerned with taking the first step, a search for a method or route.

In the second sense, the *arche* is an open question; it is the uneasiness of the philosopher who is anxious to take root in the truth, in an original truth; it is the anxiety of not missing the entrance, of finding his footing, like a mountain climber. Here it is a question of philosophy as something to be done, as a task and as a search.... Therefore, the beginning is a problem, not an insoluble problem or even a false problem, but a *radical* philosophical question in the proper sense of the term. The awareness of this situation of a problematic beginning is precisely philosophy become a radical question to itself.

⁴ Pierre Thevanetz. *What is Phenomenology? and Other Essays*. Trans. by James Edie. Chicago: Quadrangle, 1962. Pp. 93-112.

With Descartes and Husserl as our guides, this work explores the theme of a radical return to beginnings, a theme marked by three decisive reversals. The first moment occurs when Descartes makes a radical turning against late scholasticism and resurgent skepticism, and towards the foundation of certain knowledge within subjectivity. The second takes place where Husserl makes a radical turning away from a Cartesian-inspired philosophy and against the skepticism and relativism inherent in empirical psychology. And the third is where Husserl in his later works, especially *The Crisis of European Sciences*, effects a reversal against his own previous phenomenological conclusions, a programme secured as a result of his previous radicalization of the Cartesian project. This investigation is, however, far more than a comparison and contrast of the overt similarities between Descartes and Husserl. It is, for example, more than the assertion that the phenomenological reduction finds its historical source in Cartesian doubt, or that they both construe the significance of their projects as the establishment of *prima philosophia*. The mere citation of methodical doubt in the *Meditations* as the starting point for Husserl's initial conception of the reduction has been well-documented, not least by Husserl himself who repeatedly calls upon Descartes as his "spiritual forefather". Nor is it the brief of this work to show that Husserl employs a fabricated "Descartes" in terms of which he elaborates his own transcendental turning. In contrast with this rarefied exemplar, this highly stylised provocateur, Husserl also devoted a considerable amount of his lectures as early as 1905 to a detailed historical understanding of the Cartesian project.

It is worth reminding readers that two of the most important sources for Husserl's multifaceted views on Descartes were not published until recently. The *Lectures on First Philosophy* (from 1923/24) were not published in German until 1956-59 [HUS VII & VIII], and though translated into French by A. Kelkel in 1970, they have not yet been translated into English. Fortunately, Ludwig Landgrebe (Husserl's personal assistant in the 1920s) has provided a detailed 30-page summary of the second half of this monumental work, translated into English as "Husserl's Departure from Cartesianism".⁵ The next best primary source, the *Lectures on Logic and Theory of Knowledge* (from 1906/07) was published only as

⁵ in *The Phenomenology of Husserl: Selected Critical Readings*. Ed. by R. O. Elveton. Chicago: Quadrangle, 1970. pp. 259-306.

recently as 1985 [HUS XXIV] and remain unavailable in English. Some of Husserl's most pertinent discussions of first philosophy as transcendental phenomenology and the viability of a universal science founded on a priori principles still remain in manuscript.⁶

Numerous introductory books on Husserl and Pure Phenomenology do little more than summarize Husserl's appropriation of Descartes in Husserl's own terms. Whereas the accuracy of such a summation is indeed a vital issue in critical scholarship, there is not a great deal *at issue* in commentators' discussion of Husserl's "Descartes". It is a relatively uncontroversial, if complex and lengthy, task for a good Husserl scholar to collate the numerous references and synopsize a fairly good picture of Husserl's picture of Descartes. Granted Cartesian scholars' ability to explore their subject in depth, it is on highly specific and sometimes open-ended topics that there is a conflict of interpretations. None of them would take for granted, for example, the charge that Descartes committed a vicious circle in reasoning for the existence of god, or that there is a problem regarding the interaction of *res cogitans* and *res extensa*. Though of course, anyone could *conclude* a critical analysis with a statement compatible with either standard interpretation. What is missing then in commentary on Husserl's exposition of Cartesian doubt, intentionality, mind-body union, etc., is quite simple and clear-cut -- an intimate, unprejudiced and informed knowledge of Descartes. With this background it is possible to segregate what Husserl claims Descartes says with what Descartes actually says, or can be plausibly construed to say on open-ended issues. It would then also be possible to show that it is often precisely Husserl's divergence from Descartes' position which generates his most profound insights.

Let me expand on this last statement so that the significance and scope of this divergence is entirely clear. It seems rather uncontentious to show that where Husserl says he follows from or re-engages a Cartesian point, *this* is what Husserl meant by such-and-such a claim *in his own terms*; and the same of course, where Husserl departs from or disengages from what Descartes said. Although such an exegesis is a *precondition* for a proper understanding, this is not what is indicated by Husserl's

⁶ For which see, Rudolf Bernet, Iso Kern & Eduard Marbach. *An Introduction to Husserlian Phenomenology*. Northwestern Univ. Press, 1992. chap. 8 and 9.

convergence or divergence from Descartes. It will be one of the principal claims of this thesis that it is (sometimes) precisely where Husserl *misidentifies* Descartes' position on a specific issue that the most interesting Husserlian insights are generated. Thus, for instance, Husserl's assumption that there is indeed a vicious circle in Descartes' demonstration of god's existence as the guarantee of the certitude of clear and distinct seeing allows Husserl, in the rejection of an unknowable transcendent deity, to postulate unknowable other subjects lying beyond any possible intuition. Where Descartes *seems* to need god's existence in order to make the argument work, so it also *seems* that Husserl needs the demonstrable presence of conscious others in order to secure this-worldly claims by the philosophizing subject.

In contrast with Husserl's explicit homage and the commentaries which this avowal has generated, it is my contention that there is a *pervasive and systematic parallelism* between their respective projects, which surfaces at the junctures indicated by Husserl. But beneath the surface, this thematic continuity flows onward, occasionally diverging but usually converging on those topics where a similar treatment is required. And the reason that this happens is due to a profound congruence in their respective points of departure, methodological procedures and hypothesized destinations. One of the most common metaphors for the philosophical enterprise employed by both thinkers is that of a voyage of exploration; and in this respect, the old world left behind, the narration of the voyage itself and the discovery of a new world are articulated in compatible vocabularies. The very fact that this narrative is called a *journey* is something which they both feel distinguishes their enterprise from that of their predecessors and contemporaries. Descartes explicitly names this format the "order of reasons", to counterpoise it with the building or edifice of the natural sciences, the "order of essences"; the same distinction which Husserl makes between the "order of cognitions" and the "order of beings".

The intellectual backgrounds which provoked them to inaugurate such large-scale enterprises are strikingly similar in several respects. First, the renewed skeptical arguments of the late 16th and early 17th C. which incited Descartes to search for an indubitable foundation for human knowledge bear remarkable convergences with the relativist and positivist tendencies in empirical psychology against which Husserl struggled. Second, they both approached metaphysics as the discipline which was most appropriate for sorting out such problems after years of detailed investigations into mathematics.

Descartes' *Rules for the Direction of the Mind* (1628) and the Essays appended to the *Discourse on the Method* (1630-35) occur at approximately the same stage in his philosophical development as do Husserl's work in the foundations of mathematical cognition between 1887 and 1895. Third, they both envisioned the most fruitful course forward as springing from a first philosophy which would be an all-embracing science of sciences (*mathesis universalis*), or more accurately, a theoretical model of scientific cognition; a model which both were to abandon as untenable in later works. Even their most intractable difficulties show distinct parallels. For each, the most elaborated form of their mature philosophy almost foundered on the subject's interface with the world. For Descartes, this occurred with the mind's interaction with physical bodies in the material world; for Husserl, with the ego's confrontation with the givenness of other egos in the inter-subjective world. These pervasive thematic parallels account for remarkable resonances throughout considerations of specific philosophical problems.

If the *Rules* is to Descartes' unfolding of his philosophical project what the *Philosophy of Arithmetic* is to Husserl's, then the *Discourse* bears a similar relation to the *Logical Investigations*. Of course, the *Discourse* was intended by its author as a propaedeutic for the three lengthy Essays which are applications of this method to particular topics. The *Logical Investigations* comprise six detailed researches into specific areas, preceded by the justly famous "Prolegomena to Pure Logic", which is both a refutation of the psychologistic interpretation of logical laws and the outline of a new eidetic psychology -- phenomenology. Just as Descartes took the central message of skepticism to its limit in order to overturn any skepticism whatsoever, so Husserl employed the most rigorous extension of exact psychology to describe the a priori conditions for the occurrence of cognitive acts and their contents and thus to disprove any claim for their origin in contingent matters-of-fact. The touchstone for cognition which is immune to doubt in these early stages, against which both Descartes and Husserl evaluate other epistemic claims, is that of the *intuition* of mathematical truths. And the formal ontology which they both need to make sense of the kinds of intuition and intuitable contents which are disclosed in other cognitive modes are markedly similar; for Descartes, simple and complex natures, and for Husserl part-whole theory.

The skeptical milieu in which Descartes opens his quest for an indubitable foundation for a universal science has a striking parallel with the confusion and uncertainty in psychological enquiries at

the end of the 19th Century. The skeptical crisis of the early 17th Century largely revolved around sustained attacks by Protestant theologians against the primacy and authority of the Catholic Church, and Catholics' defence tactics against these charges. Luther, Calvin and others denied that the "visible church" was the final arbiter in issues of religious faith, especially with respect to the interpretation of holy scripture. The Reformers argued that the truth of a religious claim should be based on the inner conviction of the claimant and argued against what they perceived as circularity in the Catholic Church's position. They pointed out that if the criterion for the truth of a theological statement about doctrine or scripture was whether it accorded with the dictates of the official church (i.e. the Pope), then the church itself derived its primacy in deciding such issues from scriptural sources, that is. from their own unilateral interpretation of a specific doctrinal injunction.

The late 16th Century saw the appearance of a number of publications which further exacerbated theological controversies and spilled over into debates on virtually every subject. The startling appearance in 1562 of Sextus Empiricus' *Outlines of Pyrrhonism*, previously thought lost in antiquity, provided more or less ready-made arguments on an immense variety of topics. Montaigne's *Essays*, four editions of which came out between 1580-95, became an exceptionally popular epitome of skeptical tropes and anecdotes, bolstered with his dyspeptic observations on human nature. Standard remarks about sensory illusions, the waking/dreaming dilemma, and the fallibility of human reason were supplemented by broader and deeper questions. At least with respect to Descartes' contemporaries, the intellectual situation seemed to be highly unstable and, according to some alarmists, portended a surge in atheism. From his early days, Descartes had seen that his task was not to counter each particular skeptical argument, while standing on shifting ground, but rather to *radicalize* (i.e. to capture the root of) the entire philosophical enterprise itself. The search for a certain foundation would generate "little by little" one well-proved point at a time, securing a science which would provide the means to refute any skepticism whatsoever. It was

his extraordinary insight to take doubt to the extreme limit (but not beyond) and then turn its full force against the fulcral point of the cogito in order to accomplish this ambition.⁷

In the Seventh Replies to the *Meditations*, Descartes responds to his most obdurate critic:

We should not suppose that sceptical philosophy is extinct. It is vigorously alive today, and almost all those who regard themselves as more intellectually gifted than others, and find nothing to satisfy them in philosophy as it is ordinarily practised, take refuge in skepticism because they cannot see any alternative with greater claims to truth. [CSM II. 374]

The main tenets of a psychological derivation of logical laws, which Husserl was to identify as the most persistent *anti*-philosophical trend in the 19th Century, are to be found in their most explicit form in the work of John Stuart Mill, Theodor Lipps and Christoph Sigwart. The main thrust of their position is that the truths of logic (and other “exact” sciences) are based on empirical observations of discriminable phenomena, where invariant regularities in their occurrence indicate lawlike rules which observers can follow in order to *determine* whether other instances are in accord or discord with these rules. The only kind of observation available with regard to math/logical statements is *introspection*, which for these empiricists, was indeed a sort of visual inspection *turned inwards*. The mental origin of specific logical postulates was the genesis of their definition and their validity resided in the subject’s cognitive ability to explicate them. The fact that such mental occurrences took place in human cognition, which was governed by definite protocols of psycho-physical formation, meant that these postulates were also governed by the same laws. The most productive parallel to be drawn between 17th C. skepticism and 19th C. psychologism can be shown by highlighting the conflation between two epistemologically disparate notions: on the one hand, the contingent, factual occurrence of logical cognitions in a human subject; and on the other hand, the necessity and ideality of what those cognitions *are about* irrespective of who (if anyone) has them.

⁷ See B. Williams. “Descartes’ Use of Skepticism”, in *The Skeptical Tradition*. Ed. by Myles Burnyeat. Univ. California Press, 1983. p. 337-40.

Husserl's mature reflection on these matters in his lectures from 1925 strikes a chord resonant with Descartes' attitude towards half-hearted skeptics who couldn't see that a radical skepticism undermined the ground beneath their feet. In the elaboration of descriptive psychology into a genuine phenomenology, Husserl appropriated the skepticism of his psychologistic adversaries and then directed it towards the very method upon which they had based their conclusions. In doing so, he overturned the empirical, contingent grounds for generating the indubitable veracity of math/logical axioms and established the validity of the objectual content of these self-same "mental facts".

It could come to pass that a very radical scepticism could be directed against this [naturalistic] psychology... such as could never be directed against the exact science of nature.... The most radical sceptical reaction... shall interest us here. This sceptical critique turns towards nothing less than the entire methodology of this psychology insofar as it ever raised the claim actually to explain the facts of the life of the mind mentally. [PP. 3]

Both Descartes and Husserl envision an overall response to the skeptical challenge as a demand to renovate the principles under which claims to "scientific" knowledge are made at all. For each this involves demolishing a false picture or model of what a scientific theory of the world would seem to require a mind to be: for Descartes the mind was another 'object', but of a unique kind; for Husserl, the mind could never be another kind of object encountered in the world. Their radicalization of pre-given structures of scientific knowledge disclosed an entirely new world accessible only after methodical doubt's fulfilment and the phenomenological reduction's completion. It is significant that for each thinker, this entails not simply a new way of looking at an old problem, or new terms for expressing an accepted distinction, but rather an entirely new philosophical discourse *in which* that problem or that distinction can be articulated. For Descartes to characterise an account of his quest for certainty via universal doubt as a *fable* is, in some sense then, to give a history of this new world. Although he suppressed publication of *Le Monde* in 1633 when he learned of Galileo's condemnation, he summarized these issues in 1637 in Part Five of the *Discourse*. "I did not want to bring these matters [physical laws] too much into the open, for I wished to be free to say what I thought about them without having either to follow or to refute the

accepted opinions of the learned. So I decided to leave *our world* wholly for them to argue about, and to speak solely of what would happen in a *new world*." [CSM I. 132; emphasis added]

It is in "our world", obscured with "a fog or mist" of prejudices and received opinions, that theologians dispute about the criteria for religious truth and the skeptics undermine what little has been established in the nascent empirical sciences. In the bright "new world" revealed by the subjective certitude of thought reaching its object, any traveller who enters there has had the way cleared for him. In contrast with the objective certitude of the natural sciences, that for each lawlike thought there is state of affairs to which it corresponds, this certitude is unique to its domain -- that for each *thinking act* there is something *thought*. "For a while then, allow your thought to wander beyond this world to view another world; a wholly new one which I shall bring into being before your mind in imaginary spaces." And further, "My purpose is not to *explain*, as they [the learned] do, the things which are in fact in the real world, but only to *make up* a world in which there is nothing that the dullest minds are incapable of conceiving." [CSM I. 90, 92; emphasis added] This introduction to the new world is accompanied, so to speak, by an invitation for each reader to enter along with him, in much the same way that Descartes enjoins the readers of the *Meditations* to meditate along with him.

This old world is the world of the natural attitude, so vigorously called into question by methodical doubt, and the new world is the universal consequence of just that purification and clarification. It is the same metaphor which Husserl employs to characterise devotion to the task of phenomenological analysis. "Our procedure is that of an explorer journeying through an unknown part of the world, and carefully describing what is presented along his unbeaten paths, which will not always be the shortest. Such an explorer can rightfully be filled with the sure confidence that he gives utterance to what must be said.... even though new explorations will require new descriptions with manifold improvements." [Ideas I. 235] This theme of "losing the world in order to gain it" epitomizes Descartes' and Husserl's summons for *radical conversion* in the philosophical enterprise. And the most potent metaphor to signal this dramatic transformation is that of philosophy as a *path* or *course* and the philosopher as an explorer.

About to depart from the old world, with his vision firmly fixed on the new, Descartes remarks: "It will be enough if I *open the way* which will enable you to discover them [physical laws] yourselves.... So I shall be content to continue with the description I have begun, as if my intention was simply to tell you a fable." [CSM I. 97-8] Even when Husserl comes to depart from his own previously argued for departure from Cartesianism, citing Descartes' overlooking of transcendental subjectivity as too damaging for this way, he still uses the same imagery. "The proper sense of the discovery Descartes could not seize for himself. Behind the apparent triviality of his well-known phrase *ego cogito, ego sum* there open up in fact depths all too dark and deep. It was with Descartes like Columbus, who discovered the new continent, but knew nothing of it, merely believing to have discovered a new sea route to India." [HUS VII. 63] To be fair to Husserl, he definitely uncovered vast domains in the nature of consciousness unexplored by Descartes, but to be fair to Descartes -- and unfair to Husserl's unfairness to Descartes -- the Cartesian way did reveal some of these "depths dark and deep", to a greater extent than Husserl would admit. And to be scrupulous with Husserl's own simile, whatever Columbus discovered about this new-found land could have been accurate, irrespective of whether he called it India or not.

Throughout his philosophical career, from the *Rules* to the *Passions of the Soul*, Descartes consistently exemplifies the twofold orientation of philosophical activity with the same dual metaphor. Long before his first explicit discrimination of the order of reasons and the order of essences in the Second Replies, he makes the same segregation in an implicit fashion using the images of *philosophy's path* and *science's building*. The first glimpse of this occurs in Rule XII of the *Rules*: "When we consider things in the order that corresponds to our knowledge of them, our view of them must be different from what it would be if we were speaking of them in accordance with how they exist in reality." [ibid. I. 44] In a letter to Mersenne of April 1630, after abandoning work on the *Rules*, he describes an abrupt change of direction in these terms: "I was forced to start a new project [*Le Monde*] rather larger than the first. It is as if a man began building a house and then acquired unexpected riches.... No one could blame such a man if he saw him starting to build another house more suitable to his condition." [ibid III. 21] It is ironic that he felt compelled to vacate this new house three years later after learning of Galileo's condemnation, since the astronomical physics in this work endorsed the heliocentric picture.

Only rarely does one image occur in a passage without the other: a "building" is consistently used to illustrate the cobbled-together character of both half-baked "scientific" enterprises (such as alchemy and astrology) and the fanciful metaphysics of the scholastics; a "path" is always used with a positive overtone to illustrate a new way of conducting philosophical enquiries. There are numerous instances of this dual metaphor in the *Discourse*, where Descartes cautions against borrowing or adding to a gerry-built edifice and commends instead the right following of the path. "It is not enough to have a good mind, the main thing is to apply it well.... Those who proceed but very slowly can make much greater progress, if they always follow the right path, than those who hurry and stray from it." [ibid I. 111] It is this falling away from the right path which so disconcerts the thinker in the *Meditations* after he has purged all his prejudices and withdrawn from the sensory world. "So serious are the doubts... that it feels as if I have fallen unexpectedly into a deep whirlpool which tumbles me around.... Nevertheless, I will make an effort and once more attempt the *same path* which I started on yesterday." [ibid II. 16]

The persistence of the building/ path metaphor throughout his writings indicates a thematic continuity in the manner in which Descartes understood his own philosophical activity. The building image is usually phrased in the third-person, about some other thinker, and concerns the construction of an alleged science, little by little, from simple statements to more complex, cross-referenced structures. Not until the Seventh Replies, where Descartes claims that his method *imitates* that of the architect, and Part One of the *Principles*, which is an *expression* of the results of that method, will Descartes commend the procedure of building. On the other hand, the path image is almost always phrased in the first-person, with respect to the thinker's point-of-view and signifies the unique perspective of moving forward in an unknown land. The sense of this image is quite evident: having secured each point along the way and kept one's bearings through backward-glancing assessments, the next step can be clearly fixed and known in advance as the one required. One of the tasks of this current research will be to show that visualizing a radically new philosophy as a journey of exploration is founded on the discrimination between order of reasons and order of essences and that this is prefigured by the imagery of science's building and philosophy's path.

The task of charting such unknown territory and of making its novel features intelligible to fellow travellers involves employing a terminology which is not burdened with accreted layers of meaning. Both Descartes and Husserl are at some pains to carefully disassociate their vocabulary from that of their predecessors. But this can never be just a matter of coining new terms -- old wine in new bottles -- as though one could Humpty-Dumpty-like call anything by any name one chose. To a large extent new terms are required insofar as one's conceptual analysis picks out new things which can then be distinguished. As mentioned earlier, such a fundamental analysis of the structures of consciousness relies heavily on a primitive notion of intuition, i.e. direct cognitive acquaintance. This intuition, the mind's grasp of that which is presented precisely *as* it is presented, does not operate solely within the domain of sensory perception -- it is not literally another form of "seeing". Rather, it is the most basic cognitive relation towards any kind of mental 'content', whether perceptual, imaginative, signitive or otherwise. Within the entire sphere of *cogitata* considered purely as the correlate of thinking acts, a primitive distinction can be made between two sorts of 'things' presented, and two ways in which they can be related: an *x* is either a part (of a whole) or a whole with parts, an *x* is either dependent or independent of other parts and wholes.

In only one text does Descartes deal explicitly with the basic building blocks of his new world, and that is in Rule XII of the *Rules*. After distinguishing between the two basic operations of the mind, intuition and deduction, and the ways in which innate cognitive power combines with images to produce the various faculties, he introduces eight basic theorems regarding simple and complex natures. The kinds of simples and composites, and the ways in which they can be related, comprise a conceptual framework which he appeals to again and again, most notably in the *Meditations*, as Jean-Luc Marion astutely observed.⁸ The eighth theorem, in fact, explicitly stipulates that all of the previous theorems' discussion of simples and composites can be recast as analyses of different types of parts and wholes. It is our contention that this formal ontology functions within Descartes' project in much the same way in which Husserl's part-whole theory functions in his. The Third of the *Logical Investigations* is devoted to a

⁸ Jean-Luc Marion. *Sur L'Ontologie Grise de Descartes*. Paris: J. Vrin, 1975. pp. 131-48.

formal ontology of parts and wholes, their relations of dependence and independence, and the ways in which parts and wholes form larger wholes. Husserl's mereological study occurs in just the same place in his overall project as does Descartes': after investigation of mathematical cognition, before the discovery or inception of universal doubt, and before embarking on a journey of exploration.

Descartes' unprecedented employment of methodical doubt to clear the way for a radical rethinking of the meaning of certainty in human knowledge is perhaps the single topic in his entire work which has inspired the most commentary. It would seem that, even with regard to Husserl's reworking of this in the phenomenological reduction, there just wouldn't be anything more to say. A number of issues seem to be exhausted: methodical doubt itself, the three stages which universalize this, and the problems which are elided due to Descartes' silence on specific features. But this is to ignore another exceptional component of Descartes' program, his novel theory of ideas, in terms of which it is possible to look again at the method of doubt. Previous discussions by eminent commentators such as Hintikka, Gewirth and Kenny have focused exclusively on what is called into doubt, the thoughts, beliefs and opinions which are not immune to the query: is it possible that this idea could be false? Descartes will consider all such ideas *as if* they were false in order to discover what remains.

But in the Preface he has already warned the reader that there is an ambiguity in the word "idea" itself. "Thus 'idea' can be taken materially, as an operation of the intellect, in which case it cannot be said to be more perfect than me. Alternatively, it can be taken objectively, as the thing represented by that operation." [CSM II. 7] In the First Replies, he explicitly discriminates "the determination of an act of the intellect by means of an object [from] the object's being in the intellect in the way in which its objects are normally there." [ibid. II. 74] The reader ignores this injunction at his peril, and one would be best advised to look again at the use of the term 'idea' throughout the *Meditations*, specifically with respect to the sections on doubting. A number of recent scholars, including Calvin Normore, Lilli Alanen and Vere Chappell, have made a strong case for a primitive notion of intentionality in the Third Meditation. In its simplest expression this means that the 'objective' reality of an idea indicates the cognitive content, or objectual correlate; and the 'formal' reality (what Descartes confusingly calls its 'material' aspect) indicates the cognitive act, or act correlate. Detailed argument will be presented to establish this

distinction, but its consequences on methodical doubt are what most concern us here. I hope to show that a new understanding of Cartesian doubt can be gained by considering various stages (or phases) in the *act of doubting*. A great deal of what Descartes has to say about abandoning prejudices, withdrawing from the senses, and attending carefully to well-secured results is illumined in a more coherent manner through this analysis. A richer understanding of the revolutionary nature of the *Meditations* in the context in which it first appeared will also thus be achieved.

During the period when Descartes composed the *Meditations*, the religious connotations of this title would not have been lost on any reader. L. J. Beck⁹ was one of the first 20th C. scholars to point out that *Devotional Exercises*, especially those of Ignatius Loyola, would have been readily familiar to the reading public. Such a literary model would have been well-known to the young Descartes who first studied philosophy at the Jesuit College of La Fleche. These exercises were meant to be carried out in complete solitude and endorsed several ascetic precepts -- poverty, chastity and obedience -- which the *Meditations* also subscribe to. *Poverty* in the solitary thinker's renunciation of prejudices and received opinions; *chastity* in his complete disengagement from the sensuous world; and *obedience* to the dictates of the "natural light" which reveals god as the guarantee of certitude. Descartes' ascetic orientation towards his own life is quite evident in his choice of a personal motto -- *Bene qui latuit, bene vixit*, "He who is well concealed (or lives quietly), lives well". [CSM III. 43; see also, III. 300] In the 17th C. context of religious controversies regarding the correct way in which to express one's true faith, usually evinced in the church to which one gave allegiance, the expression of an individual's orientation toward philosophical issues could readily be framed in terms of a *radical conversion* in that direction. "I am vain enough to think that the [Catholic] faith has never been so strongly supported by human arguments as it may be if my principles are adopted.... And so I resign myself to do for my part whatever I regard as my duty and *submit myself* for the rest to the providence which rules the world." [ibid. III. 88]

⁹ L. J. Beck. *The Metaphysics of Descartes*. Oxford, 1965. pp. 28-38; for a detailed study, see Gary Hatfield "The Senses and the Fleshless Eye", in *Essays on Descartes' Meditations*. Ed. by A. O. Rorty. Univ. California, 1986. pp. 48-55.

There are so many respects in which Descartes' and Husserl's projects are congruent that it should come as no surprise to read Paul Ricoeur's sketch of phenomenology as a "spiritual discipline (*ascèse*)" and that "a true skeptical crisis is at the origin of the phenomenological question... How can [consciousness] move beyond itself and encounter its object with certainty?"¹⁰ It would seem then that both the theological-skeptical crisis of the 17th C. and the psychological crisis of the 19th C. motivated a radical rethinking of the legitimate scope of philosophy as such, and that this rethinking was conceived by its originators as a form of *conversion*. After the publication of the *Logical Investigations* in 1900 and before the public avowal of transcendental idealism in *Ideas First Book* in 1913, Husserl was to experience a personal reevaluation of his mission in the light of persistent doubt. "I am unable to live in truth and veracity. I have tasted sufficiently of the torments of obscurity and doubt where I am tossed about in every direction. I must achieve internal coherence." [HUS II. xv] In addition to this internal coherence, researches carried out to expose the autonomous a priori structures of consciousness require enormous efforts, strenuous labours expended "in the face of our philosophical *poverty* in which... we are vainly fatiguing ourselves." [Ideas I. 115] In a marginal note to this passage, he remarks that, "These considerations produced for me the insight that a transcendental epoche can be effected, which makes a well-founded and independent philosophy possible." And, of course, Husserl situates the historical *and conceptual* origins of the epoche in Descartes' procedure of methodical doubt.

If the Cartesian method of universal doubt is that moment in his journey which initiates a radical conversion, it is indeed a turning-with (*con-vertō*) the one who first and foremost meditates according to the order of reasons. It is thus at once a turning-against the scholastic tradition and the skeptical challenge, and a turning-toward that which grounds scientific cognition in certitude. Although Husserl will repudiate the consequences of this manoeuvre as leading to a denial of the already pregiven world, he will embrace the principle of abstention prior to this. It is through a neutralized holding-in-place of that which is abstained from [or, in his own words, the bracketed within the brackets], that the phenomenological reduction is distinguished from Cartesian doubt. As such, in light of phenomenology's

¹⁰ Paul Ricoeur. *op. cit.* p.31.

projected course as a “spiritual discipline”, the epoche assumes the guise of an individual turning-with Husserl himself. In his most mature work, during reflections on the vocation of one who is called or summoned to carry out such work, he is quite explicit about this connection. “Perhaps it will even become manifest that the total phenomenological attitude and the epoche belonging to it are destined in essence to effect, at first, a complete personal transformation, comparable in the beginning to a religious conversion...” [Crisis. 137]

If we concede that the individual’s decision to activate the epoche is indeed a form of personal conversion for the philosopher, and thus a turning-away from the errors of previous thinkers, Husserl makes no second-order claim for his philosophy that any other philosopher who worked on a grand scale would not also make. One cannot imagine Hume or Kant, for instance, *not* demanding that the reader rethink central issues in light of the program being advanced. In the sense that this is a summons for those who follow to turn-towards “a new region of being never before delimited in its peculiarity”, this summons is perfectly congruent with every major shift in the philosophical tradition. Is there something else, something beyond the demand to put aside your prejudices and start again from zero, that Husserl seems to be calling for that no one else would sensibly call for? Exception has been taken by some commentators to the epoche as a procedure for achieving a cognitive orientation where it has been likened to a quasi-mystical state.

In an otherwise well-balanced and informative book, David Bell is quite dismissive in this regard: “The reduction itself is a procedure for inducing in us a particular state of mind of which no adequate conception can be formed by those who have not already successfully performed the reduction and thus achieved that state.”¹¹ Let’s say that the fact that one has attained this reduced state of mind is a necessary condition for clarifying structures of consciousness and the constitution of meaning, this in no way invalidates the *content* of what this reduced cognitive state is now in a position to grasp -- either a claim made in this state is cogent or not. To conclude from one’s contingent *inability* to follow this procedure that what is gained under its auspices is of dubious value is to commit a psychologistic fallacy.

¹¹ David Bell. *Husserl* [Arguments of the Philosophers Series] Routledge, 1990. p. 162; next quote *ibid*.

Such a fallacy is the *inverse* of the claim that the ability to cognize a specific logical relation, e.g. commutability of identity, confers legitimacy on what is posited in that cognition. Bell goes on to state that, "there is... something dismal and dogmatic about a philosophy whose utility, cogency and plausibility depend essentially... on the individual philosopher's having undergone some esoteric experience the nature of which he is then in principle unable to communicate."

Such a caricature of the phenomenological method relegates it to the literary domain occupied by Blavatsky's Theosophy or L. Ron Hubbard's Scientology. Certainly David Bell and other critics do not in fact treat the results of most phenomenological investigations with such disdain. It is a *contingent* feature of any thinking subject that it is capable of achieving, or recognizing that it has achieved, the epoche; and although the eidetic insights secured thereby are dependent on this attainment, the truth of these insights is not thus dependent. This insightful dependence is not confined to the epoche: conceptual distinctions between, e.g. "sense" and "reference", or "necessary" and "sufficient condition" are achievements of thinking acts, where what was vague and confused becomes clear and distinct. In other words, understanding occurs where each term is both completely significant and sharply separated from the other term. Every one who has philosophized has had these moments of clarity, the resolution of a conceptual aporia, and though this disclosure may be misplaced or forgotten, the fact that *it was achieved* and what was disclosed within it are not lost. At a higher level than these instances, the epoche is a world-bracketing conceptual alteration whose central unlocking mechanism is the concept of intentionality.

Before proceeding to discuss the Cartesian notion of intentionality, we can allow Husserl himself to answer the charge of esotericism:

Consciousness of something is therefore something obviously understandable of itself and, at the same time, highly enigmatic. The *false paths* into which the first reflections leads, easily generate a *skepticism* which negates the whole troublesome sphere of problems. Not a few already bar access by the fact that they cannot bring themselves to seize upon the intensive mental process.... If the right attitude has been won, and made secure by practice, above all however, if one has acquired the *courage to obey* the clear eidetic data with a radical *lack of prejudice* so as to be unencumbered by all current and learned theories, then firm results are directly produced, and the same thing occurs for everyone having the same attitude; there accrue firm possibilities of communicating to others what one has himself seen. [Ideas I. 212; emphasis added]

In contrast to Cartesian methodical doubt which *pretends* that the actual world may be illusory and that thus all knowledge derived from that world has to be treated as if false, Husserl's epoche holds all that appears to consciousness in suspension, irrespective of whether or not it is founded on an actual world. If Descartes then seeks to recover a world clarified and made distinct through the dual guarantee of the cogito and god, Husserl seeks to uncover the meaning of this appearing or being presented to consciousness and the epistemological conditions which make this possible. Such conditions, their attendant cognitive structures, the different layers of meaning, the genesis of the ego and its habits -- all these issues spring from the incontrovertible characteristic that consciousness always exhibits intentionality. It is not enough to say of this crucial notion that consciousness always indicates being conscious *of*...., for it also always indicates being conscious *to*.... a unifying and unitary subject. This dwelling or abiding within the sphere of consciousness, which will reveal the domain of transcendental subjectivity, is that fateful discovery initiated by the unprecedented scope of the phenomenological reduction.

It is almost fatuous to assert that though Descartes and Husserl are both motivated to radicalize and transform the nature of philosophical enquiry, they differ with respect to *this thing*, or that Husserl goes further than Descartes with respect to *that thing*. It is quite patently within the purview of the present work to exhibit convergent points of departure and divergent destinations. But beyond that, it is our aim to show that there is already more of a Husserlian radicalness in Descartes than Husserl (or his commentators) will admit, and that Cartesian moments on Husserl's journey occur at unremarked places, most especially when Husserl does not explicitly acknowledge this influence. This work is not an exercise in the "exact science" of hindsight, permitting us to isolate and underline curiously prescient statements in Descartes which foreshadow elements in Husserl, since Husserl himself quite openly refers throughout his career to Descartes as his "spiritual forefather". As far as Husserl's construction of an exemplary "Descartes", e.g. in the *Cartesian Meditations*, his Descartes is far less a radical rethinker of first philosophy than Descartes would give voice to, and far more of a phenomenological explorer. In this respect, at least, we entirely agree with Walter Soffer's adroit summation: "The precise nature of Husserl's

neo-Cartesianism is thus hard to specify. To the extent that Husserl's view of his relation to Descartes is correct his claim as a neo-Cartesian depends upon the distinction between motif and doctrine. To the extent that his view of the relation is incorrect... Husserl's claim can ironically be supported in some measure."¹²

Particular features of the 17th C. skeptical milieu and 19th C. empirical psychology will account for their divergent situation of the thinking subject, the notion of scientific knowledge, and the trajectory of a radical return to first principles. Nevertheless, both the Cartesian and the Husserlian enterprise will require the elimination of theoretical prejudices, an Archimedean point from which to begin one's quest, the attainment of an incorrigible domain of knowledge, and the return to a previously abandoned world, now purged of all that is not clearly and distinctly evident. Each of these moments has a different meaning (in the broadest sense) for the two thinkers, but the overall process, symbolized as a journey, is one of losing what is already given, going outward or away from that, and then returning with a new-found understanding. The skeptics and reformers of the early 17th C. were in orbit around the problem of the certainty of knowledge and the criterion of religious truth, stabilized in their trajectory by the gravity of the problem's insolubility. Their only surety was through an *act of faith* which instantly transported them into the sun of god's illumination, metonymized in philosophical discourse under the rubric of the "natural light". Descartes was in fact quite fond of astronomical metaphors and his progress through the stages of the *Meditations* can be recast in these terms. His method of universal doubt, which took skepticism to the *limit*, allowed him to reach escape velocity and free-fall about the sun, then back again to earth -- a description of the parabola of a comet.¹³ It seems strange then that the progress of methodical doubt should be termed *hyperbolic* (a rhetorical figure for exaggeration) when its observable trajectory is *parabolic*. If any project has a hyperbolic course, it would lead one into the cold and unlighted regions beyond our solar system. These are the dark regions of occultism and atheism which Descartes feared would await those who did not fully understand the *purpose* of such doubting or when to put it aside. "I

¹² Walter Soffer. *op. cit.* p. 157.

¹³ Descartes conducted many inquiries into the behaviour of comets; see CSM III. 37.

was afraid that weak minds might avidly embrace the doubts and scruples which I would have had to propound and afterwards be unable to *bring them back*." [CSM III. 53] This last phrase underlines the sense of his project as an outward and return journey, synopsised in the programmatic motto: in order to gain the world one must lose it first.

Of all the scholars who have discussed Descartes' influence on Husserl, Pierre Thevanex should be singled out for his highly evocative, condensed imagery regarding their interconnection. It is one of the oddest features of this seminal article that the comparisons he elicits are so enlightening, so startling in their rendition, that one *wishes they were accurate*. Thevanex picks up on this same extroverted imagery of a return journey when he asserts that the radical point of departure for Descartes is the centre of a centripetal motion, while for Husserl it is the terminus of a centrifugal motion. However, he is quite wide of the mark when he continues: "thus we find in Descartes the virginal beginning and the linear method, going forward without return or recovery, following the order of reasons which are irreversible. While in Husserl we see a circular movement which revolves around its point of departure, radicalizes it progressively without ever truly leaving it."¹⁴ If this is an accurate image of the Cartesian project according to the order of reasons, then it is mistaken with respect to what is uncovered in this course which, according to the order of essences, establishes the certitude of knowledge and the infinitude and perfection of god. If one rejects this linear account of the Cartesian journey then the alleged circularity in reasoning regarding god's guarantee of clear and distinct seeing can be understood as one instance of the *reversibility* of the ordered reasons which have demonstrated these particular essences. A close reading of the *Meditations* shows that this interpretation accords well with Martial Gueroult's reaction to Thevanex' statement. "It seems that when sketching, with great philosophical talent, his parallels between Descartes and Husserl, Thevanex has not succeeded in exorcising the classical fiction of a linear Descartes, the inventor of a fictional world, who has been able to forget the real because of mathematics and who goes straight forward as a maker of abstract theorems."¹⁵

¹⁴ Pierre Thevanex. *op. cit.* p. 104.

¹⁵ Martial Gueroult. *op. cit.* vol. II, p. 260.

At the end of the Second Meditation, the meditator shows some concern for his readers who have been brought to a pitch of hyperbolic doubt and may fear that they will never have a sure anchorage in the old world again. After his rejection of the deceitful power of the evil genius and the revelation of the cogito's certainty, he has isolated that thing which thinks (*res cogitans*). Amongst those things which this thinking being thinks about is the world of the senses whose openness to illusion and error had first inspired the program of universal doubt. "I see that without any effort I have now finally got back to where I wanted." [CSM II. 22] In this passage he definitely implies that he already had some notion of where he wanted to arrive before he started out; and more than that, that this would involve a turning-away from the world in order to then return to it. "Descartes also says... that the doubt is not to be carried into everyday life.... That judgement, moreover, is not simply retrospective, something to be recovered when one has come out at the other end; rather, it is an observation about the nature of the project."¹⁶ It will not be until the Sixth Meditation, however, with the second ontological proof firmly in place, that not only the sensory world but the entire domain of thoughts will be reconstituted on the grounds of an objectively verifiable evidence.

Paul Ricoeur interjects a comment on the phenomenological reduction during his discussion of the Cartesianism of Husserl's project, a comment which contains an implicit criticism of Thevanetz' remark that there is no world regained by the meditator.

The kinship is evident between the Cartesian doubt and this suspending of the belief in being which we apply to the world. Contrary to Descartes' Sixth Meditation, however, no world will be found again. The epoche does not consist in stretching an ontological bond in order to be more assured of it; rather it claims to dispel irrevocably the realistic illusion of the in-itself. Only the intersubjective perception of [Husserl's] Fifth Cartesian Meditation will change the 'for me' into 'for others'... and then the world will be found (or regained) again.¹⁷

¹⁶ B. Williams. *op. cit.* p. 341; Gaston Berger also emphasizes this outward-return journey in, *The Cogito in Husserl's Philosophy*. Trans. by Kathleen McLaughlin. Northwestern Univ. Press, 1972. p. 73.

¹⁷ Paul Ricoeur. *op. cit.* p. 88.

If Descartes' project is to establish the foundations for an entirely new realm of being, whereas Husserl's project is to disclose an entirely new sense of the world, then these outward-return movements will have parallel trajectories but divergent destinations. It is specifically with reference to the *epoche* that Husserl's rhetorical terminology incorporates this metaphor. The *epoche* suspends or brackets all acts of belief-positing in the natural attitude so that one is able to seize upon what could have effected this alteration: "That then is what is left as the sought for phenomenological residuum; though we have excluded the whole world with all physical things, living beings and humans, ourselves included. Strictly speaking, we have *not lost* anything but rather *have gained* the whole of absolute being which, rightly understood, contains within itself, constitutes within itself, all worldly transcendencies." [Ideas I. 113; emphasis added]

A synoptic image may be of some help in understanding the parallelism between Descartes and Husserl in terms of which there are clear-cut structural isomorphisms. One can think here of Descartes' reference to abbreviated representations, e.g. astronomers' imaginary circles, in order to construct such an image. Imagine then, if you will, a world sphere which the meditator turns away from and leaves behind by carrying through the process of methodical doubt. The journey narrated in the *Meditations* describes a parabolic course outward and into the void (or, in this case, a plenum). But before it is lost forever, the meditating ego is captured by the infinite epistemic force of god as first truth in the order of beings and turns back towards its worldly origins. But the world it returns to is not the same: there are now two spheres, *res cogitans* and *res extensa*, which perfectly coincide. Where before there had been a profusion of sensuous qualities, now there are precise configurations of continuous quantities. Lest the explorer ever think that he may lose his bearings in this new world, he can always retrace his course through the order of reasons. And he is always capable of doing this in the certain knowledge that god has indeed provided the ground for all this-worldly truths.

In Husserl's case, there are three courses away from this world: the psychological, the ontological and the Cartesian. Our concern here is only to point out the path traced by the last course. In some sense, the enterprise initiated by the phenomenological reduction is not an outward-return journey. Imagine instead a world which remains sharply in focus, but where the 'act' of focusing is itself thematized, that

is, made the 'object' of reflective thought. In cinematic terms, this would be a reverse forward zoom, where the camera backs away while the lens zooms in on the subject; the outward motion is exactly coordinated with the optical forward closure. The effect for the viewer is one of *cancelling* or annulling the two polarized movements -- and yet the subject itself remains just as before. What has changed is the frame, the background and foreground; all those features which provide the necessary context for situating the subject. An important point to mention here is that the startling effect of this visual transformation can be appreciated only if one attends to its continuous unfolding; a before and after picture would be entirely inadequate. In the same fashion, the bracketing of the world leaves intact what is in the brackets, but makes its situation or placement, and hence its *meaning*, stand out. This is the significance of Husserl's remark that where Descartes discovered an entirely new world of being, Husserl himself was concerned to uncover an entirely new sense of the world.

The significance of a *purified* sense of the world as a phenomenon, one which is subtended by the general thesis of the world's being, can perhaps be made more clear by dramatically rephrasing the question: what does the *epoche* accomplish? What does it mean to say that the whole world is gained *in a new way* once it has been lost? For the phenomenologist, philosophical enquiry is not a matter of *apprising* oneself of the facts in the case, as though the source of knowledge of the world were a puzzle whose answer was hidden somewhere. Rather, it is a matter of *surprise* that the world appears just this way and not otherwise, a radical contingency signified by Husserl's reference to "the irrational fact of the rationality of the world." Insofar as the philosopher considers the mind's empirical, circumstantial connection with the world, it will always be the case that the world looks just like the philosopher's terms describe it to be. There isn't anything else against which a "bridging theory" of the mind's awareness of the world could be adjudicated. "As traditional theory of cognition shows, this enigma [of cognition] cannot be solved as long as immanence and transcendence are regarded in the form of an ontologically grounded opposition which could only be overcome by constructing a connecting 'bridge'."¹⁸ For example, *granted* Spinoza's hypothesis of one infinite substance with an infinite number of attributes

¹⁸ Bernet, Kern & Marbach. *op. cit.* p. 54.

(etc.), each of his further claims about particular features will make sense in terms of this world-picture. What is it then about the world and the mind such that this fulfilment or correspondence would always take place? One way to answer this question would be to study the various frameworks in which thinkers articulate their vocabularies, for example, an archaeology of philosophical discourse. Since it is not possible to ask what the world would be like disengaged from consciousness, another approach to this question would be: what would consciousness be like disengaged from the world? This disengagement is the task of the phenomenological reduction and the domain uncovered thereby is the proper subject-matter of a transcendental phenomenology.

CHAPTER 2
17TH CENTURY SKEPTICISM *versus*
19TH CENTURY EMPIRICAL PSYCHOLOGY

It is one of Descartes' lasting achievements that, confronted with the skeptical crisis of the late 16th and early 17th Centuries, he did not participate in the controversy as either a proponent of the recently revived Greek skepticism nor as an adherent of any dogmatic or theological viewpoint. In stark contrast to Montaigne, Charron, Gassendi and others, Descartes does not quote from, borrow or depend in any way upon previous writers. None of his works show the reliance which his predecessors and contemporaries placed on the authority of other writers, especially the ancient authors. Even Galileo attempted to disguise (in some degree) the originality of his heliocentric theory by resort to the testimony of ancient cosmographers. It has long been established that Renaissance and Reformation writers had an entirely different attitude toward the work of previous writers than the post-Enlightenment obsession with originality and accurate citation of references -- a position of indebtedness we now take for granted. Montaigne borrowed liberally from Sextus Empiricus, Cicero's *Academica*, Guy de Brues' *Dialogues*, and many others, usually without acknowledgment; Charron borrowed from Montaigne and Sextus; Gassendi from Montaigne, Charron and Sextus, and so forth. This was very much the ordinary editorial practice of the period, so how much more extra-ordinary must the *Meditations* have been when they appeared in print in 1641. Aside from its astounding ambition to establish the possibility of certain knowledge in the sciences upon an indubitable chain of reasons, this was to be accomplished without recourse to any outside testimony; in fact, of course, such external support was prohibited tout court.

Many of the criticisms directed against Descartes (especially by Gassendi in the "Fifth Objections") included the charge that he ignored what "many learned men" had said on some topic or other, and his response was brusque and constant. The mere fact that N. asserts that it is obvious that p (or not-p) bears no relation whatsoever to the certitude of p (or not-p). If he and some other thinker are in

agreement on this topic, it is no more than a fortunate byproduct of the certainty of the very proposition under question.

"Those who seek learning from standard texts and indexes and concordances can pack their memories with many things in a short time, but they do not emerge as wiser or better people as a result. On the contrary, there is no chain of reasoning in such books, but everything is decided either by appeal to authority or by short summary syllogisms, and those who seek learning from these sources become accustomed to placing equal trust in the authority of any writer..., so little by little they lose the use of their natural reason and put in its place an artificial and sophistical reason." [CSM III.222]

The 17th Century Skeptical Background - Basic Features

Recent research¹ has shown the unprecedented manner in which Descartes confronts the skeptical challenge, primarily in terms of the complete control of the skeptical position which he exercises for purposes unforeseen by any skeptical arguer. For the interpreters of Cicero's *Academica*, skeptical arguments were deployed to demonstrate that nothing certain could be known, that it was futile to engage in the search for truth in the sciences. For the Pyrrhonian followers of Sextus Empiricus, that fact that any given epistemic assertion could be countered with an equal-weighted assertion for the opposite (*isosthenia*), was sufficient to persuade the wise man to suspend judgment (*epoche*) and attain a position of equanimity (*ataraxia*). In either version of skepsis, the arguer must be prepared to counter any assertion presented to him and show how this assertion leads to either nonsense, circular reasoning or an infinite regress; but in this format, the skeptic is not in control of which specific knowledge claims are being made. The repertoire of standard arguments is purely defensive and makes no constructive attempt to

¹ Bernard Williams. "Descartes' Use of Skepticism", in *The Skeptical Tradition*. Ed. by Myles Burnyeat. Univ. California Press, 1983. pp. 337-52; E. M. Curley. *Descartes Against the Skeptics*. Blackwell, 1978. pp. 1-20; Michael Williams. "Descartes and the Metaphysics of Doubt", in *Essays on Descartes' Meditations*. Ed. by A. O. Rorty. Univ. California Press, 1986. pp. 117-39.

explain what sort of conditions might be required in order for a knowledge claim not to be ruled out. Descartes will completely turn the tables on his opponent by appropriating the position of total ignorance, calling into doubt every conceivable condition for knowing, and then showing that only through the founding of certain knowledge can one *avoid* circular reasoning and an infinite regress.

It is not the purpose of the present study (at the moment anyway) to reiterate or argue further for the extra-ordinary manner in which Descartes overturns any possible skepticism. Nor is its task to illuminate the transmission of ancient skeptical material in the works of 16th and early 17th Century humanists, reformers and counter-reformers. Rather its task is to highlight specific lines of thinking in those writers who most influenced and shaped the skeptical crisis of this period. Only in this manner will it be possible to elucidate the claim that Descartes adopts the position of the most relentless skeptic and, in taking this to the limit, thus overturns skepticism. Husserl, in his attack on 19th Century psychologism and relativism, will characterize his own standpoint as a "descriptive psychology" which does not hesitate to go further than any other empirical psychology, and in doing so, invalidate any empirical foundation for logic. Aspects of particular 17th Century skeptical disclaimers about the origin, validity and relational character of knowledge (or the fallibility thereof) bear remarkable parallels with particular claims by 19th century empirical philosophers about the similar character of logical constructions. It is highly significant in this respect that Husserl, in his summary position regarding all previous researches in the empirical psychology of cognition, will describe his own phenomenological inquiry as "radical scepticism." [PP. 3] Indeed, it is the skeptical procedures of the natural sciences which empirical psychologists did not take far enough into their own domain; they "suspended judgment" at the point where indeed all factually occurring mental events are intrinsically relational and origin-dependent, hence their hypotheses are inconclusive.

Natural science has become great by unhesitatingly setting aside the luxuriant growth of ancient skepticism and *refusing* to conquer it.... Natural science has taken half a step backwards again whereby it has given room to new skeptical reflections and let itself be limited by skeptical tendencies in its possibilities for work.... The right position... is that position which sets aside

with full awareness all skepticism together with all "natural philosophy" and "theory of knowledge", and takes cognitive objectivities where one actually finds them. [Ideas I. 47]

In order to contrast a groundless skeptical orientation with the grounded certitude of Cartesian *scientias*, it will be necessary to examine specific arguments and positions of contemporary 17th Century skeptical writers. In the historical context in which the rule of faith, papal infallibility, and the Church as arbiter of theological doctrine had been called into question by Luther and Calvin, the publication of Sextus Empiricus' compendium of ancient skepticism added further fuel to an already heated debate. Latin editions of Sextus' *Outlines* by Henri Stephanus in 1562 and by Gentian Hervet in 1569 made available for the first time a vast array of skeptical material which far surpassed what had been previously provided by Cicero's *Academica* and Diogenes Laertius' *Lives*. Montaigne was the first great popularizer of Sextus' and Cicero's materials and the several editions of his *Essays* in 1580, 1588 and 1595, especially the "Apology for Raymond Sebond", spread his trenchant criticisms beyond the Latin-speaking community. Pierre Charron (1541-1603) in *La Sagesse Trois Livres*, published in 1601 and 1604, reworked some similar material, but presented the standard skeptical tropes in a much more systematic and coherent manner. Though Charron has usually been described as an intimate friend and emulator of Montaigne, recent archival research² has concluded that they were never close associates and has rehabilitated Charron as a modestly competent and very popular skeptical writer. "In his day, and in the half century after his death, Charron had an influence at least as great as his master's [sic] in furthering the break with tradition and in forming the ideology of both the *libertinage erudit* and the French Counter-Reformation."³ Pierre Gassendi (1592-1655), close associate of many of the libertines, Marin Mersenne, and other influential writers, published his first work, the *Exercices*, in 1624 and was one of Descartes' most rebarbative critics.

² Renee Kogel. *Pierre Charron*. Geneva: Librairie Droz, 1972. pp. 17-19.

³ Richard H. Popkin. *The History of Scepticism from Erasmus to Spinoza*. Univ. California, 1979. p. 56.

Another skeptical writer in this historical context is Francisco Sanchez (1550-1623) whose *Quod Nihil Scitur*⁴ of 1581 is quite distinct from the previous writers both in style and depth of argument. Where Montaigne, Charron and Gassendi write in a discursive, rambling fashion, interspersing lengthy polemics against the stupidity and arrogance of mankind with brief synoptic arguments presented almost like factual anecdotes, Sanchez clears the table of the new skeptics' banquet of ancient ideas and presents a rigorous and systematic attack on the conviction that one can attain certitude in knowledge on the basis of reason alone. "This is book differs radically from the [other] works... in that it is a philosophical work in its own right. Sanchez is more interesting than any of the other skeptics of the sixteenth century except Montaigne in that his reasons for his doubts are neither the anti-intellectual ones of someone like Agrippa, nor the suspicion that knowledge is unattainable just because learned men have disagreed up to now."⁵ Charles Schmitt also singles out Sanchez, Montaigne and Charron as the three most important figures in pointing the way to the skeptical crisis of the 17th Century⁶.

Sextus Empiricus' Outlines of Skepticism and its Influence

Although Sextus' outline of the ten tropes or modes of skeptical argument has been amply discussed elsewhere⁷, they will be worth some attention now in order to illustrate later developments. Sextus defines skepticism as "an ability, or mental attitude, which opposes appearances [*phainomena*] and judgments [*noumena*] in any way whatsoever, with the result that, owing to the equipollence [*isosthenia*] of the objects and reasons thus opposed, we are brought firstly to a state of mental suspense [*epoche*] and

⁴ Francisco Sanchez. *That Nothing is Known*. Intro & Notes by Elaine Limbrick, Latin text ed. & trans. by Douglas Thomson. Cambridge Univ. Press. 1988.

⁵ Popkin. op. cit. pp. 37, 39.

⁶ C. B. Schmitt. "Rediscovery of Ancient Skepticism in Modern Times", *The Skeptical Tradition*. p. 237.

⁷ Gisela Striker. "The Ten Tropes of Aenesidemus", in *ibid.* pp. 95-115.

next to a state of quietude [*ataraxia*]."⁸ This summary definition comprises virtually all of the key terms in ancient Pyrrhonian skepticism, aside from the concept of the criterion, which has two senses: "In the one, it means the standard regulating belief in reality or unreality...; in the other, it denotes the standard of action by conforming to which in the conduct of life we perform some actions and abstain from others."⁹ The former sense will implicate the most complex epistemological problems which will extend much further and deeper than the ten tropes, or to which the ten tropes are methodically reduced. The latter sense is the synoptic notion which embraces the moral maxims whereby the skeptic lives his life; this is taken up again in the tenth trope.

Sextus then presents the ten tropes, also called arguments or positions, each of which capitalizes on the *relativity* of perceiving subject and object perceived. The eighth mode has a second-order status which subsumes the previous seven modes, since it stands as a generic trope to their specific charges. There are at least two broad arguments from relativity, for which abundant anecdotal evidence is cited under the heading of one or another trope. The first (reconstructed) argument is that: the same things produce different impressions in different subjects (including animals) and human subjects express differing judgments on these same things. The production of different impressions, and hence judgments, is due to differing conditions under which the thing appears (e.g. well-lit, far away, close by, etc.) and/or differing dispositions in the subject (e.g. drunkenness, illness, senility, etc.). It is impossible to decide which impressions should be given greater credence; thus, although it is possible to give an adequate account of how the thing appears to the subject, it is not possible to demonstrate that this appearing "corresponds with" or adequately represents the thing as it is *in itself*. The most appropriate decision then is for the subject to suspend judgment on the true nature of the thing.

⁸ Sextus Empiricus. *The Works*. Ed. & trans. by R. G. Bury, four vols. Cambridge: Loeb Classical Library, 1933-49. PH. I. 8. [standard citation]

⁹ *ibid.* PH. I. 21.

In "Against the Logicians" Sextus reworks the material of the ten tropes¹⁰ in presenting the subject, the object and the relative conditions before the "seat of judgment". in his juristic metaphor, to inquire which of the contesting positions should be the "magistrate" in sorting out such diversity of opinion. This magistrate's decisive power indicts the problem of the criterion discussed at great length in the "Outlines" where it is attacked on two main fronts¹¹. Any candidate for the criterion that would settle which of the many conflicting appearances indicates the "true nature" of the underlying object, must make an assertion about the veracity of the appearance. If this assertion is not to be counter-balanced with a contrary assertion, it must demonstrate a proof for this assertion's assent. Since such a proof will also have only appearances to rely on, it will also itself have to be proved, and hence generate an infinite regress.

The second attack consists of a highly ingenious "mis-reading"¹² of the structure of a hypothetical syllogism, which Sextus introduces on numerous occasions under various guises. In the first conditional premise of a syllogism regarding an observable fact, e.g. "If it is light, it is day". the second premise, "It is light", is already contained. So if it is an issue of the definitional character of some matter under discussion, e.g. that day is light, it is redundant to assert this as a contingent matter-of-fact in order to reach the conclusion in a chain of reasons. Sextus will rely on this abstract argument regarding the nature of inferential reasoning in his compendia of debates on the various candidates for the decisive criterion. His charge is that any judgment constructed as a hypothetical conditional will have to assume in its major premise a contingent feature of the world of appearances, which is expressed again in the minor premise as exactly that matter-of-fact in need of proof -- and thus reason in a circle. This misreading is only feasible as a considered attack on the validity of syllogistic argument due to a fundamental misunderstanding about the nature and relation of contingent matters-of-fact and the absolute or true nature of any given thing.

¹⁰ Sextus. AL. I. 182-4.

¹¹ *ibid.* PH. II. 18.

¹² On this misreading, see the discussion by Stephen Gaukroger, "The Nature of Abstract Reasoning", in *Cambridge Companion to Descartes*. Ed. by John Cottingham. Cambridge Univ. Press, 1992. pp. 107-8.

It is not to our purpose to consider skeptical arguments regarding specific theories about the correspondence (or lack thereof) of appearances with underlying things, but rather with the rejection (or acceptance) of judgments allegedly based on those theories and the reasons adduced for such rejection (or acceptance). Thus it is not an issue here to uncover the epistemological presuppositions in the skeptic's theory of perception and the ontological diremption between that which is presented [*phantasia*], appearances [*phainomena*] and the underlying reality [*hypokeimena*]. "The skeptic does not divide the world into appearances and realities so that one could ask of this or that whether it belongs to the category of appearance or to the category of reality. He divides questions into questions about how something appears and questions about how it really and truly is, and both types of question may be asked about anything whatever."¹³ It just doesn't seem to have occurred to the skeptics to *adjust* their theory of what it means to have knowledge of the world in order to *take account* of these divergences. In any case, discursive efforts to isolate specific aspects of the skeptical analysis of judgments will underline salient features of the problem of the criterion.

In response to Voetius' charge that his works "open the way to scepticism", Descartes replies:

If you are referring here to the actual time at which an act of faith, or natural cognition, is elicited, you are destroying all faith and human knowledge, and are indeed a sceptic.... But if we are talking of different times... this merely shows the weakness of human nature, since we do not always remain fixed on the same thoughts... For I was speaking not of any certainty that would endure throughout an entire human life, but merely of the kind of certainty that is achieved at the moment when some piece of knowledge is acquired. [CSM III. 223]

In the outline devoted to the existence and nature of cause [*aition*]¹⁴ one of Sextus' arguments is that someone who asserts that there is some cause of some thing, either asserts this absolutely, i.e. without basing his *assertion* on any rational cause, or he does so due to certain causes. If he asserts this absolutely,

¹³ M. F. Burnyeat. "Can the Skeptic Live his Skepticism?", in *The Skeptical Tradition*. p. 128.

¹⁴ *ibid.* PH. III. 23-5.

his statement is "no more" weighted than the assertion of the opposite statement, in light of neither having any rational cause. Whereas if he asserts this on the basis of certain causes, then he will be assuming that which he wishes to prove. This is an important moment, a crucial conflation of the notion of physical causation with the notion of psychical motivation. The kind of causal relations between things is not the same kind as those "reasons" which might be based on observation of physical causation, which convince or motivate a person to make a specific knowledge claim. One feature of Descartes' program in the mapping of the physiology of perception, memory and imagination will be to carefully mark out this distinction. Though the activity of the "animal spirits", insofar as they are an operative principle in corporeal memory (etc.), occurs in a manner equivalent to the operation of causal regularities in the physical world, the connection between ideas and their expression in judgments cannot be subsumed under the laws of physical causality. The certitude of clear and distinct ideas is the result of, amongst other factors, their being grounded in a domain which has, *from the start*, been divorced from the entire world of sense impressions and preconceived judgments about physical causality.

In his dissection of the empirical psychologists' derivation of logical laws from factual mental events, Husserl will underline a similar interpolation from one domain to the other and make this trenchant criticism. After pointing out the first confusion, in identifying logical laws as contents of judgments with the judgments themselves, the second confusion is that: "We confuse a law as a term in causation with a law as the rule of causation. In other fields too, we familiarly employ mythical talk of natural laws as presiding powers in natural events -- as if the rules of causal connection could themselves once more significantly function as causes, i.e. as terms in just such connections." [LI. 102] It is definitely a case of mythical talk for Sextus to so collapse physical causality into the force of rational persuasion and to consider these laws as "presiding powers" in the operation of human thought.

In order to disprove the existence of physical bodies Sextus resorts to a similar equivocation between the mathematical concept of a limit and the actual boundaries of a physical body¹⁵. He adduces a spurious "proof" which is only plausible if there is a systematic equivocation between "parts" of a

¹⁵ *ibid.* PH. III. 41-3; cf. also AP. I. 258-60.

geometrical object, which are its functional predicates, and "parts" (in some atomistic sense) of the boundary of a physical thing. This particular version of terminological slight-of-hand is found in a number of arguments purporting to refute the physical laws of motion, and so forth. The enigma of abstract parts of an abstract whole vis-à-vis dependent parts of a physical whole will exercise all of Descartes' ingenuity in attempting to reconcile the Christian mystery of trans-substantiation of the body of Christ in the Eucharist with his principles of physics. [CSM II. 173-78]

Gorgias is quoted with much approval¹⁶ in his elimination (or disavowal) of non-existent things which are thought of (fictitious entities, e.g. the chimera) and the consequent inability of a speaker to communicate anything about either non-existent things or sensible things. Disregarding the highly sophisticated "arguments" on the ontological status of existent and non-existent things, whether thought or not thought, let us allow Socrates to take care of that. It is, however, worth noting the alleged consequences of this position on speech itself, and hence, of course, on what judgments are formed thereby.

For the means by which we indicate is speech, and speech is not the real and existent things; therefore we do not *indicate* to our neighbors the existent things but speech, which is other than the existing realities. Thus, just as the visible thing will not become audible, and vice versa, so too, since the existent subsists externally, it will not *become* our speech, and not being speech it will not be made clear to another person. [emphasis added]

It is a serious distortion of whatever sense is conveyed by "indication" that speech as the means of communication indicates nothing more than the fact that speech occurs, due to the fact that whatever it is you are communicating about is not the same sort of thing as the process of communicating. This distortion has repercussions in the disavowal of intelligible speech as a distinguishing feature of human beings. Montaigne, Charron and Gassendi will make much of the alleged over-statement of speech as human-specific in their anecdotal evidence for communication between animals. As part of his general

¹⁶ *ibid.* AL. I. 80-6..

scheme for the founding of the sciences, Descartes will restore signifying speech to its pre-eminent place as a uniquely human prerogative. [CSM I. 140]

If speech were to distinguish humans from other animals (but doesn't), then perhaps the faculty of sensation would distinguish animals from non-living things. In the endless and repetitive search for an infallible criterion by which any perception or judgment could be evaluated as evident or true, reason in the apprehension of intelligible things, and sensation in the apprehension of sensible things will each be discounted. The former is discarded in light of the pre-theoretical assumption that there is nothing in the intellect which has not already been presented to the senses, and the latter in terms of the following argument, attributed to Carneades. All sensation occurs due to the impact of evident things, and insofar as anything is presented to sense, this being-sensed will indicate both itself and the appearance. This presentation occurs as an alteration in our sense faculty whereby one *perceives* both the alteration, i.e. the presenting as such, and that which is presented in the presenting, i.e. the appearing thing. "But since [cognition] does not always indicate the true object, but often deceives and, like bad messengers, misreports those who dispatched it, it has necessarily resulted that we cannot admit every presentation as a criterion of truth, but only that which is true." Such a disqualification of sense as a potential criterion (whatever its other demerits) is the result of having treated the act of presentation as the same sort of thing as that which is presented; of requiring from the psychical occurrence of some presenting act the veracity of which only the presented content is capable. To modify Carneades' metaphor, it would be to accuse the messenger of lying (or being mistaken) because he had correctly reported the occurrence of a falsehood (or a mistake).

Several specific lines of skeptical argument have been isolated for analysis for two purposes. The first is to throw some light on those challenges which would later be reinvigorated by Montaigne, Charron and Gassendi. The second is to explicate conceptual confusions which point the way to a continuity of systematic treatment by Descartes and, reworked under the aegis of naturalistic psychology, by Husserl as well. If it has not been necessary in this present study to consider all of the main skeptical arguments, Descartes himself rejected a point-by-point rebuttal. On the other hand, it is not possible to treat skepticism as a unified philosophical position in order to attempt to refute it as Descartes did. If Descartes

took control of skepticism in order to bring it to an extremity of self-purgation, for this study to so take control, analyses of specific skeptical arguments would indeed evaporate. Some of these conceptual confusions and collapses would survive the Cartesian overthrow and, like a persistent contagion, reappear in mutated forms throughout the next two hundred years. Having "evolved" in parallel with the progress of the natural sciences, some of them reemerge in the 19th Century in empirical investigations into the psychological origin of logical laws.

The Skepticism of Montaigne's Apology for Sebond

Montaigne is justly credited with being the first modern writer to consistently and thoroughly treat himself as the theme of an "empirical investigation"; not the nature of the human mind in general, but the nature and growth of this one person, through the story of his education, travels, illnesses and other all-too-human trials. With more influence and as much insight as any other 16th century writer, Montaigne assimilated the skeptical arguments of Sextus Empiricus and Cicero's *Academica*, especially in the "Apology for Raymond Sebond", written in the 1570s and appearing in each of the expanded editions of the *Essays*. As well as the unprecedented disquisition on his own convictions and fallibilities, Montaigne was also responsible for the first deployment of arguments from cultural relativism. Having read accounts of the Spanish discovery of the New World, as well as recently published compendia of curious practices in the Orient, and having access to sailors' and natives' first-hand reports of North America, he was in an unrivaled position to make comparisons with customs and beliefs completely alien to the European tradition. This cultural relativism, combined with his vigorous advocacy of skeptical doubt was to give Montaigne's popular writings an extra-ordinary influence on skeptical writers for the next two centuries.

Montaigne begins by defending Sebond's *Natural Theology* against two charges: that Christians are wrong to attempt to support their religious beliefs with human reason; and that Sebond's arguments

are weak and unsuited for what he wants to demonstrate¹⁷. Montaigne will take up the challenge, with assistance from Augustine's example, and go further than merely meeting his critics' presumption, teaching the lesson that "the weakness of their reason can be proved without our having to marshal rare examples; that reason is so inadequate; so blind, that there is no example so clear and easy as to be clear enough for her; that the easy and the hard are all one to her; that all subjects and Nature in general equally deny her any sway or jurisdiction."

Man is vain and presumptuous to consider that the faculty of reason could set him apart by showing the way to certainty in questions of knowledge. If rationality is cited as that feature distinctive and unique to human beings, by means of which they and they alone can presume to have certain knowledge, one avenue of attack is to demonstrate that this alleged rationality is not unique to human beings and thus does not give them any privileged access to truth. Later in the "Apology", he will attack the second half of this claim; even if rationality were unique to humans, it is fallible, prone to error and misuse, and cannot attain to any such certitude. Montaigne cites numerous examples, drawn mostly from ancient authorities, of the intelligence, faithfulness, probity, etc. of many animal species. In stark contrast, only humans show willful ignorance, cowardice, vengeance and sexual voracity beyond the bounds that any animal would exhibit. It is strange to consider that just where Montaigne situates human deficiencies as illustrations of man's inferiority to other animals, it would perhaps be more pertinent to cite such behavior as evidence of human reason's ability to deny and override merely biological constraints.

Philosophy is singled out as the paragon of human reason and numerous instances brought forth, similar to the animal comparisons, to demonstrate that even the most eminent philosophers disagreed about every conceivable issue, and that having the rules of logic at their command did not prevent them from suffering in the way that any other human would. "When men are demented their very actions show how appropriate madness is to the workings of our souls at their most vigorous.... Do you want a man who is sane, moderate, firmly-based, and reliable? Then array him in darkness, sluggishness and heaviness. To

¹⁷ Michel de Montaigne. *The Essays of Montaigne*. Ed. & trans. by M. A. Screech. Allen Lane/The Penguin Press, 1991. pp. 491, 500.

teach us to be wise, make us stupid like beasts; to guide us you must blind us."¹⁸ It is the possibility of madness which will help clear the way for Descartes at an early stage of methodical doubt, and it will be laziness or sluggishness which pulls him *away from* clarity and distinctness attained through this doubt. [CSM II.13 & 15]

It is in the second half of the "Apology" that Montaigne begins his extensive borrowings from Sextus' *Outlines* and Cicero's *Academica*. Montaigne approves of the skeptics' goal of *ataraxia*, freedom from disturbances; perplexities which cause fear, envy, pride and other conditions due to which humans commit the most "inhuman" acts. The skeptics' technique consists in their ability to counterpoise any assertion with another of equal weight. "This is doubt taken to its limits: it shakes its own foundations; such extremes of doubt separate them completely from many other theories." And then, "Other people are prejudiced by the customs of their country, by the education given them by their parents or by chance encounter: normally, before the age of discretion, they are taken by storm and, without judgment or choice, accept this or that opinion of the Stoic or Epicurean sects."¹⁹ A formulation which has echoes in the opening lines of the First Meditation on prejudices of childhood and education and the need to demolish everything in order to start at the foundations; and in the comments in response to the Seventh Objections, that those who find nothing in philosophy to satisfy them are taken in by the skeptical sect. [CSM II. 374]

Descartes will deftly extract some of Montaigne's figures²⁰, reworking some of these images from the ancient skeptics, and then redirect them to attack the position that knowledge is unattainable. One of Montaigne's best-known metaphors is: "No system discovered by man has greater usefulness nor a greater appearance of truth [than Pyrrhonism] which shows us man naked, empty, aware of his natural weakness, fit to accept outside help from on high....He is a blank writing-tablet, made ready for the finger of God to

¹⁸ *ibid.* p. 548.

¹⁹ *ibid.* p. 561.

²⁰ E. M. Curley traces a number of borrowings from Montaigne in Descartes' writings, see his *Descartes Against the Skeptics*, pp. 13-20.

carve such letters on him as he pleases."²¹ It is precisely to this "stripped" subject, naked, empty and aware of prejudices that Descartes will turn for the subject most suited to the reception of clear and distinct ideas and the operation of intellectual seeing. The image of the "blank writing-tablet" will reappear again in Charron and Gassendi, and most famously in Locke's *Essay* a century later.

Montaigne will later mock detachment from the senses: "One fine philosopher even poked out his eyes so as to free his mind from visual debauchery... but by the same standard he ought to have blocked up his ears.... Eventually he would have to deprive himself of every other sense, for all the senses can have this dominant power over our reason and our soul."²² Exactly the motivation which impels Descartes to do this, if only as a thought experiment. "I will now shut my eyes, stop my ears, and withdraw all my senses. I will eliminate from my thoughts all images of bodily things." [CSM II.24] Insofar as Montaigne would refuse to do so and hold to the conviction that all knowledge is acquired through the senses, his image for the mind is that it is like "a tool of malleable lead or wax; it can be stretched, bent or adapted to any size or to any bias; if you are clever, you can learn to mold it."²³ Such an image would indeed be conducive to the notion that reason has no fixed basis in itself and shifts with the infinite shiftings of the things which it apprehends. It is the *reverse* image which Descartes employs to demonstrate the operation of reason: that through all its material and apparent changes, the piece of wax remains the same piece of wax and is perceived as such by the mind alone. [CSM II.20-21]

It is the factual contingency of discrepant judgments expressed with regard to appearances, that leads Montaigne to one of his most damaging (and fallacious) statements.

The *fact* that there is no single proposition which is not subject to controversy among us, or which cannot be so, *proves* that our natural judgment *does not grasp* very clearly even when it does grasp, since my judgment cannot bring a fellow-man's judgment to accept it, which is a *sure*

²¹ Montaigne. *Essays*. p. 564.

²² *ibid.* p. 672.

²³ *ibid.* p. 637.

sign that I did not myself reach it by means of a *natural power* common to myself and to all men.²⁴

This claim – with its elision from the first clause "fact", to the next clause "proof", and the final "sure sign" – depends for its purported validity on the necessary dependence of the judgment's certainty on the psychological occurrence of such judgments in individual subjects and their psychological "power" to accurately express these judgments. This highly spurious hypothesis bears an uncanny resemblance to similar claims by J. S. Mill, Sigwart and others in their exposition of the nature of judgment.

Montaigne returns to the themes of madness and dreaming as exemplary instances of the extent of human beings' declination from the truth. "To be convinced of certainty is certain evidence of madness and of extreme unsureness." One can only be uncertain that Montaigne deliberately wanted to attribute certain evidentiality to the connection between the conviction of certainty and madness. He is also quite certain as to where such fallenness will lead: "Our waking sleeps more than our sleeping; our wisdom is less wise than our folly; our dreams are worth more than our discourse; and to remain inside ourselves is to adopt the worst place of all."²⁵ After purging himself of sensory illusions, the waking/dreaming dilemma, and so forth, it is within the interiority of the cognitive domain that Descartes will find the place to apply the Archimedean lever to shift the entire world. In addition, through his paraphrases of Sextus, Montaigne resuscitates the Greek skeptics' arguments from doctrinal relativism, suspension of judgment as conducive to quietude, sensory illusions, the alleged veracity of thoughts in dreaming, and that the search for a criterion leads to either circular reasoning or an infinite regress.²⁶

Montaigne concludes his skeptical attack on aspirations for certain knowledge based only on rational foundations with weary resignation. "There is no permanent existence either in our being or in that of objects. We ourselves, our faculty of judgment, and all mortal things are flowing and rolling

²⁴ *ibid.* p.634; emphasis added.

²⁵ *ibid.* p. 640.

²⁶ *ibid.* pp. 649, 652, 660, 674.

ceaselessly: nothing certain can be established about one from the other, since both judged and judging are ever shifting and changing."²⁷ This climactic formulation assimilates both the subjective and the objective domains, the world of being and the conditions of knowing, into an all-embracing Heraclitean flux, wherein the bewildered human's only sure anchorage will be provided by faith through divine grace. If Montaigne's motives had been to counter violent sectarianism and over-zealous enthusiasm, his trenchant and extensive critique of the poverty of reason was almost too successful. If he had wanted to highlight the virtues of skeptical suspension [*epoche*] in order to point the way to fideistic belief, the "Apology" was often read as a testimony to negative dogmatism and the adoption of an atheistic position.²⁸

Skepticism and Relativism in Charron's La Sagesse

Pierre Charron's reputation as an original and distinctive philosopher, if not of the stature of Descartes and Arnauld, has recently been rehabilitated.²⁹ Granted that Charron borrowed heavily from Montaigne's *Essays* usually without acknowledgment³⁰, he enjoyed the unenviable status of being a plagiarizer and slavish epigone of Montaigne, and one of the principal sources for libertine atheism, caricatured so ruthlessly in Francois Garrase's *Doctrine Curieuse Des Beaux Esprits* of 1623. Though Popkin derogates Charron's major work, *La Sagesse Trois Livres* (1601-04) as little more than Montaigne's "Apology" in organized form, he accords it a certain distinction, in that in this systematic format, "Charron presented what was one of the first philosophical writings in a modern language."³¹ But this is to undervalue the presentation, for where Montaigne wrote in a caustic, rambling and polemical

²⁷ *ibid.* p. 680.

²⁸ Terence Penelhum, "Skepticism and Fideism", in *The Skeptical Tradition*, p. 295

²⁹ Renee Kogel, *op. cit.* pp. 33-42; Michel Adam, *Etudes sur Pierre Charron*, Presses Univ. de Bordeaux, 1991, pp. 61-70.

³⁰ Floyd Gray has identified numerous textual appropriations, "Reflections on Charron's Debt to Montaigne", in *French Review* (35) 1962, pp. 377-82.

³¹ R. H. Popkin, *op. cit.* p. 59.

style. Charron was cautious, well-ordered and gently persuasive: where Montaigne used anecdotal evidence and ancient arguments as a weapon to attack a dogmatic opponent, Charron carefully marshaled his arguments in a chain of reasons meant to convince any attentive reader. Where Montaigne dissembles at nothing to reveal his own idiosyncratic foibles, inclinations, and convictions, Charron generalizes his account of the fallenness and variability of reason. An even balder discrepancy is that, in addition to his undoubted borrowings, Charron has detailed arguments of his own device and for his own purposes.

Descartes records in his "Private Thoughts" from 1619-20 that, "Actors [*comoedi*], taught not to let any shame [*pudor*] show on their faces, assume a mask: so shall I, having been a spectator in the theater of this world, but now about to mount the stage, come forward masked." [AT X.213] William Shea has offered an ingenious and plausible account of this cryptic remarks³² but Descartes may have had in mind Charron's "Preface" to the First Book. In his treatment of man's nature, it will be of no use to consider him in his public guise, "as a king at chess so he stands upon his guard... fear and shame and ambition, and other passions make him play that part you see." Instead, we must consider him in the most private chamber of his own house: "when he goes forth of his house into some publicke place, he goes to play a comedy, and therefore stay not you there, for it is not himselfe that plays, but another man, and you know him not."³³ Descartes certainly knew Charron's (and Montaigne's) writings well enough [CSM III.302-03] to be familiar with the arguments in *La Sagesse*. In any case, in this First Book, Charron is concerned to examine man, "made in God's image, naked and upright", in terms of the composition of his body, the faculties of the soul, a comparison with other animals, and the customs and morality evinced by different societies.

Charron has made some progress beyond Sextus' and Montaigne's notion that all knowledge derives from and can only be adjudicated with respect to the senses. He reengages the sense-deprivation image from his predecessors but with one notable divergence. "To judge well of the operations of the

³² William R. Shea. *The Magic of Numbers and Motion*. Science History Pub., 1991. p. 110.

³³ Pierre Charron. *Of Wisdome, Three Bookes*. trans. by Samson Lennard. London, nd. (c. 1612). Facs. Reprint, Amst & N. Y., 1971. Preface. p. 6. Trans. here and later slightly modified.

senses, we must be at some agreement with the beasts, nay with ourselves: for the eye pressed downe and shut, sees otherwise than in its ordinary state: the ear stopt, receives the objects otherwise than when it is open.... Seeing that one sense belies another, a picture seems to be held up to the view, and the hands are folded together"³⁴ i.e. one must pause and suspend judgment. Charron distinguishes between the Spirit, which is entirely incorporeal and immortal, and the Soul, which functions as an arbiter and "interface" between the Spirit and the entirely corporeal Body. In the previous figure then, the Spirit displayed upon disconnection from the sensory world is not arrayed in the darkness and emptiness of Montaigne's troubled reason. For what is revealed is that the Spirit is not a white empty paper, in that the "seeds" of scientific and moral precepts are contained within each Soul³⁵, having been planted there by nature itself. This germinal theory accounts for a way out of the impasse interposed by sense-only conditions for knowledge and will reach fruition in Descartes' concept of innate ideas and eternal truths³⁶. Even with this further touch-stone in truth, the rational faculty is still thought to be no more than an instrument of lead or wax.

Charron makes a conceptual distinction, similar to Descartes', between the corporeal faculties of the soul, i.e. understanding, imagination, and memory, and the parallel but incorporeal faculties of the spirit. It is notable *en passant* that it will be the emergent fourth faculty of intuition which allows Descartes to escape the tortuous "labyrinth" which Charron (and later Gassendi) will have to traverse. In his dissection of the corporeal faculties³⁷ Charron commits what amounts to a psychologistic fallacy -- given the current domain of "psychology" as the intellectual humours based on the four Aristotelian elements. The organic disposition of the soul is such that the "temperature" of the understanding is dry,

³⁴ *ibid.* I. Chap. X, sec. 8, p. 42.

³⁵ *ibid.* I. Chap. XIII, sec. 11, p. 52.

³⁶ The doctrine of innate ideas was stimulated by the revival of Platonic theory of knowledge in Nicolas of Cusa and Marsilio Ficino. See Ernst Cassirer, *The Individual and the Cosmos in Renaissance Philosophy*. Trans. by Mario Domandi, N.Y., 1963, pp. 42-5.

³⁷ Charron, *Of Wisdom*, I. Chap. XIII, sec. 1-5, pp. 46-9.

that of the memory is moist, and that of the imagination is hot. (Cold merely moderates the other three conditions.) It is not relevant to caricature or disparage the skeletal terminology of this model, but to draw attention to what sort of conclusions the author adduces from this model about the actual operations of the rational faculties. It is thus that, with respect to both the physical conditions of the subject (age, health, etc.) and the type of judgments expressed, essential features of moistness, dryness, heat and what they can be accurately attributed to in the *physical world of bodies* are also attributed to the judgments themselves, in order to account for their origin in a specific faculty. Although the empirical model employed in 19th Century psychology will be much more sophisticated, the same interpolation will be made between the psychical origin of the judging act and the content expressed in the judgment.

Charron's rejection of an argument's reliance on the authority of others would have appealed to Descartes and flies in the face of charges made against Descartes by Gassendi.

It is likewise imbecility and a great & vulgar sottishness, to run after strange and scholasticall examples, after allegations, never to settle an opinion without testimonies in print, nor to believe men but such as are in bookes, nor truth itself but such as is ancient. By this reason, fooleries and toys if they once passe the presse, they have credit and dignity enough³⁸.

In large measure this is due to the fact that for any hypothesis an equivalent and opposite hypothesis can be maintained with an equal degree of credibility. He would like to say also, with an equal degree of *evidence*, but in referring later to the recent discoveries of Copernicus and Paracelsus³⁹ Charron claims that they assert that their theories should be believed without examining the evidence – the very demand for verification which Copernicus would have welcomed. Charron does make an advance on complete suspension of judgment in stating that, with respect to equipollent but contrary propositions, only human reason makes the difference, though that wherewith it differentiates is due to principles inculcated in the human mind by God.

³⁸ *ibid.* I. Chap. XXXVII, sec. 15, p. 134.

³⁹ *ibid.* I. Chap. XL, sec. 8, pp. 159-60.

Popkin has described the Second Book of *La Sagesse* as Charron's "discours de la methode"⁴⁰ and certainly the Preface and First Chapter of this Book bear fruitful comparison with Part II of the *Discourse*. In summary⁴¹, Charron outlines the instructions for attaining wisdom: The first are preparations which include freedom from worldly error and inward passions, and the instilling of a universal liberty of mind. The second are foundations, i.e. essential probity and the choice of a proper life in accord with nature. The third are functions which comprise the governance of our own desires and respect for the customs and laws of the nation. If the first are foundations of one's chosen course, the second is termed the "raising of this building"; an image which Descartes will use as a propaedeutic to his own maxims and in many other places. The fourth rule is the fruits of the above: to be always ready for death (an avowedly Socratic notion) and to maintain genuine tranquillity of spirit, taking up the Pyrrhonian notion of *ataraxia*. Following Montaigne, the results of avoidance of error and detachment from the passions are to render one "empty and neate, like a white paper."

In his discussion of the universal liberty of spirit in judgment and volition, Charron devotes some attention to the concept of "surceance" [*epoche*] as both the most rational disposition of the wise man and as the necessary condition for receiving assurances of divine grace. The subject who has attained this suspension is one that "judges well and without passion of all things, finds in everything appearances of reason, which hinder his resolution, whereby he fears to settle his judgment, and so remains undetermined, indifferent and universal."⁴² Unfortunately, Charron will denominate the judgments that one could make, given such an epistemic condition, as themselves undetermined and indifferent. The only option which can be offered is to resolve one's will to determine in some direction, and then one is swept away again into the hurly-burly of unfounded opinions.

Nevertheless, Charron's wise man has extricated himself from the labyrinth of conflicting opinions and the signposts erected by one sect or another. He will not be paralyzed with indecision due to

⁴⁰ R. H. Popkin, op. cit. p. 60.

⁴¹ Charron, *Of Wisdom*, II, Preface, pp. 221-2.

⁴² *ibid.* II, Chap. II, sec. 1, p. 231.

suspension nor will he become an antidogmatist or extreme skeptic who will claim that nothing can be known. This sort of position then is a mitigated skepticism, and this mitigation is largely due to Charron's epistemological analysis of the acquisition and organization of knowledge. For those who have not taken the purgative of skeptical doubt, all that they know has indeed come from the senses and then been transformed by the imagination or the memory into judgments about appearances which consequently bear the impress, "like a seal in wax", not of reality but of an imaginative variant. For the wise man though, such sensory data bypass the imagination and are presented directly to reason which, with the assistance of the "seeds" of eternal truths, revealed by the natural light, allow the understanding to formulate correct rules for living. "The wise man proceeds along a fairly fixed road in life, one sceptic eye searching all about, the other rational eye fixed firmly on the road."⁴³

Gassendi's Extreme and Moderate Versions of Skepticism

Pierre Gassendi was also strongly motivated by the skeptic's practical approach to an ethical life and his earliest work, the *Exercises* of 1624, praises Charron, Montaigne, Lipsius, Seneca and Cicero, and states that but for lack of worldly experience, he would consider himself a disciple of Sextus Empiricus.⁴⁴ The *Exercises* is a very curious and precocious work, since it embraces quite a wide variety of scientific, theological and philosophical positions. Gassendi is in many respects one of the earliest empiricist philosophers and elaborated a detailed if confusing theory of knowledge based on experience and a posteriori reasoning. He accepted the Copernican revolution in astronomy and the anti-Aristotelian conception of atoms and the void, and developed some of the most virulent, if not most persuasive, arguments against standard logic, universal statements, and the primacy of mathematical principles. And yet he would have adhered to a complete relativism and solipsism if not rescued from total darkness and ignorance by the surety of divine illumination. On a number of points he prefigures Descartes' *Discourse*

⁴³ Renee Kogel, op. cit. p. 126.

⁴⁴ Pierre Gassendi, *The Selected Works*, Ed. & trans. by Craig Brush, N.Y.: Johnson Reprint, 1972. "Letter to de Pribac", pp. 4-5.

in his reworking of skeptical doubt and the *epoché*, but was sufficiently biased by the standard interpretation of Sextus that he failed to see that his own doubts about sense experience did not go as far as Sextus' original doubts.⁴⁵ It is certainly an anomaly of the *Exercises* that many of the conceptual confusions and conflation which are being highlighted here reach their "clearest" formulation, that is, the confusions become more pronounced and incommensurate epistemic claims are stretched to the breaking point.

In introducing these "indigestible compositions of mine", Gassendi seems to start out in a promising manner with an invocation made more memorable by Descartes in the *Discourse* and the *Meditations*. "In the beginning it seemed to me that I would need great mettle to break free where so few have tried to stand on their own feet, to rid myself of so many habits contracted since childhood from exposure to common men, to shake off the shameful yoke of this prejudice."⁴⁶ But this promise is diluted when it becomes apparent that his purpose in "starting afresh" is to redress the balance between the ancient skeptics and their current adversaries by rehabilitating the skeptics' tropes and restoring their charm. He revives Sextus' and Montaigne's derision of the worth of logic by imputing circular reasoning to the logician's attempt to arrive at the nature (or essence) of any species of material thing. In sum, where the logician recommends definition and division of examples of some particular in order to unravel its specific nature, the skeptic responds that one already has to have some notion of the thing in order to pick out examples to be analyzed. The chemist knows far more about gold and fire, the farmer about crops, etc. than any logician ever could. A peculiar notion of the proper domain of logic, to say the least, but his remarks also extend to analyses of the grammar and usage of sentences.

The same argument is brought forth to show the inappropriateness of logic to an understanding of words and propositions, since it is only words' actual usage and the grammatical structure of sentences which reveal their correct interpretation. Throughout the examples he adduces from anatomy, military tactics, music and geometry, Gassendi relies on several ingredients for his dismissal of logic: first on the

⁴⁵ Ralph Walker, "Gassendi and Skepticism", in *The Skeptical Tradition*, p. 325.

⁴⁶ Gassendi, *Selected Works*, p. 22.

physical composition and relata of the things which words "represent" or stand for; second, on empirical observation of what parts they are actually composed of or could be divided into; and third, most importantly, on his assumption that it is experience alone which can provide the criterion according to which the predication of specific features (and parts of wholes) can be judged to be true or false. The vague and hazily defined concept of experience will have far too much work to do, especially in discussions of universal concepts, common nouns, and the proper domain of mathematical entities. For example, "Universals are nothing more than what the grammarians call common nouns, or ones that can be applied to more than one object, e.g. 'man' or 'horse'." And because of his extremely limited account of the origins of knowledge, since everything that one perceives in the world is unique, *where* is this universal term, which serves to mark this thing out as an instance, located?⁴⁷

In this early work, Gassendi briefly considers whether or not it would be legitimate to construe as genuine knowledge one's own experience of the appearance of things, but not with reference to any underlying reality. "When I say that I know that I am now seated rather than standing, that it is day rather than night, that I am fasting rather than full, at home rather than in the marketplace" could this be called knowledge?⁴⁸ He balks precisely at the point where Descartes, seated in front of the fire, etc., by calling such apparent knowledge into doubt, will take one step further along the road to certain knowledge. Gassendi backs away from the precipice and asserts that only through direct acquaintance with its cause or through proof derived from this cause is there certain and evident cognition of a thing. M. F. Burnyeat has accurately pointed out that, "the idea that truth can be attained without going outside subjective experience was not always the philosophical commonplace it has come to be. It was Descartes who made it so, who (in the second Meditation) laid the basis for our broader use of the predicates 'true' and 'false', whereby they can apply to statements of appearance without reference to real existence."⁴⁹

⁴⁷ *ibid.* p. 42.

⁴⁸ *ibid.* p. 86.

⁴⁹ M. F. Burnyeat, in *The Skeptical Tradition*, pp. 143-4, note 8.

In Gassendi's Rebuttals to Descartes' Replies, one of the reasons which would prevent subjective appearance from being construed as a candidate for genuine knowledge is the explicit identification of intellectual ideas with the mental images of corporeal things. Since indubitable knowledge of things can only be founded on ideative cognition of a thing's essence and, since the images the mind receives are only of accidents and not of substance, therefore there can be no certain knowledge of any thing whatsoever. This deselection of the merely apparent is further undermined by the derivation of the meaning of a general notion from the operation of the understanding in particular circumstances, that is, its reduction to the factual origin of the notion in some experienced state-of-affairs.⁵⁰ With regard to mathematical concepts, this prolapse is exacerbated by the equation of the psychical formation in the imprinting of an image of a triangle, with the idea of triangularity. Only in a pre-Cartesian framework would it be possible to seriously contend that geometrical propositions "counted as appearances" -- "for to demonstrate is nothing more than to point out what needs to be considered."⁵¹ This reduction of the meaning of a math/logical rule to its factual origin in observation of its invariant congruence with all and every actual instance of what the rule could be applied to is a paradigmatic example of a proto-psychologicist fallacy. Ralph Walker commends Gassendi's vigorous repudiation of a priori knowledge as an anticipation of the arguments of J. S. Mill and W. V. Quine (vide direct acquaintance)⁵² -- an ironic conclusion, since this anticipation of empiricist theory of knowledge formation in logical laws is precisely what Husserl will condemn.

In his later work, the *Syntagma* of 1658, Gassendi is more explicit about this: "Thus to consider the proposition everyone continually cites, that every whole is greater than its parts: we assent to it at once because right from the start... we have never *compared* a whole with one of its parts without *noticing* that it contains other parts as well and is therefore larger and greater than it."⁵³ [my emphasis] The resolution

⁵⁰ Gassendi. *Selected Works*. p. 253.

⁵¹ *ibid.* p. 265.

⁵² Ralph Walker. *op. cit.* p. 331.

⁵³ quoted *ibid.*, from *Gassendi Opera Omnia*. Lyons, 1658. vol. II, p. 458.

of the question regarding the truth of a math/logical rule about parts and wholes. for example, is not the result of the fact that, in an indefinite series of pertinent observations about wholes and parts, no given case arises which contravenes the rule. Even if there never were such a case, the question should be (per Descartes), what conditions of knowing directed towards this object, render it impossible that it could be cognized otherwise? Only under these suppressed conditions will it be possible to elucidate why *this* instance is pertinent to the field of objects to which the rule is applied. Husserl will remark three hundred years later:

One should not confuse the *psychological* presuppositions and bases of the *knowledge* of a law, with the *logical* presuppositions, the grounds and premises, of that law.... No one can seriously hold that the concrete singular cases before us, on which our insight into a law is grounded, really function as logical grounds or premises, as if the mere existence of such singulars entailed the universality of law. Our intuitive grasp of the law may require two psychological steps: one glance at the singulars of intuition and a related insight into law. Logically, however, only one step is required: the content of our insight is not inferred from singulars. [LI. 108-9]

Gassendi's most notable example, comparable in its position in his chain of reasoning to Descartes' example of the wax, is that of an apothecary's theriac (antidote) contained in a casket with a label.⁵⁴ Theriac or "Venice treacle" is cited by Sanchez as a well-known instance of a compound of poisons which resisted all other poisons, and hence seemed to belie its real nature.⁵⁵ Demonstrations of geometrical propositions, and mutatis mutandis all other math/logical laws, amounts to no more than showing that the label (= the rule) does indeed correspond with (= holds true of) the thing contained within (= the abstract object). Gassendi's skeptical design has been to point out that human beings may fail to see what is shown in the demonstration of some rule, not that the showing itself is doubtful, and hence that such rules can hold with certainty. "The demonstration that he offers you or the means he uses

⁵⁴ Gassendi. *Selected Works*. pp. 106-8; next quote, *ibid*.

⁵⁵ Sanchez. *That Nothing is Known*. p. 280.

is not the cause of the thing's being as it is, but merely makes it obvious to you that the thing is so.... If it did not base its conclusion upon triangles appearing in some material form, it would only be chasing chimeras since no other triangles but these can exist."

If his early work in the *Exercises* of 1624 was entirely critical in its vigorous championing of a thorough skepticism, his more mature work in the *Compendium* of the 1640s shows a concerted effort to find a middle way between the skeptics and the dogmatists.⁵⁶ Despite his propensity for pedantry and his almost complete evasion of the questions and arguments brought forward by Descartes, Gassendi was a dedicated and assiduous scientist. Twenty years of his own experiments, coupled with close scrutiny of those of Copernicus and Galileo, led him to a notable advance in dealing with the problem of the criterion. No longer is it "obvious" that, if any scientific assertion can be countered with an equal-weighted assertion, an attempt to establish a criterion by which the "weight" of an assertion could be evaluated would lead invariably to either circular reasoning or an infinite regress.

At least as important as his resolution to ground the criterion of a scientific claim on experience and verification by experimental observation, is his stipulation of a normative basis according to which such claims could be evaluated. One should give credence to "an argument that cannot be legitimately contradicted", and regarding matters that need no further proof, "when things are so clear that merely stating them convinces us of them."⁵⁷ This is a worthy attempt at an escape from the standard skeptical arguments which Gassendi had so well marshaled against himself and others. But in propounding a nascent empirical theory of scientific procedure, he will not have been prepared to consider the complex and profound problems of what it means to have cognition of a self-evident proposition and how it is possible for experience alone to serve as a criterion for our knowledge of sensible and intelligible things.

Sanchez' Sophisticated Skeptical Charges in That Nothing Is Known

⁵⁶ Gassendi, *Selected Works*, p. 326.

⁵⁷ *ibid.*, p. 347.

Francisco Sanchez' *Quod Nihil Scitur*, first printed in 1581, is quite distinct from Montaigne, Charron, and other late 16th C. adapters of Sextus' Pyrrhonian Scepticism. There is no evidence that Sanchez employed the standard tropes from the recent Latin translations of Sextus, though he was thoroughly conversant with Cicero's *Academica* and Diogenes' *Lives* which included a summary of the principal skeptics' arguments. He had an extensive background in medicine, particularly Galen's popular works, and an exhaustive knowledge of Aristotle. His main targets in *Quod Nihil Scitur* are the epitomes and textbooks of Aristotelian logic heavily used in schools and universities, and the dogmatic, unquestioning reliance of their authors on "the master". Where contemporary Protestant reformers were contesting papal infallibility, Sanchez was dismayed and angered by philosophers' tacit conviction in the infallibility of Aristotelian methodology of the natural sciences.

As a professor of Medicine at Toulouse and a practicing doctor at the Hotel-Dieu for thirty years, Sanchez would have been attracted by Carneades' skeptical probabilism, initially formulated in response to the problems in diagnosing diseases. Whatever the epistemological questions regarding appearances and reality, the uncertainty of reasoning, etc., the physician, in the practical treatment of his patient, had to consider that if specific symptoms were present, it was more likely that the patient had such-and-such disease than if he did not. "The goal of my proposed journey is the art of medicine, which I profess, and the first principles of which lie entirely within the realm of philosophical contemplation."⁵⁸ A statement of general intent echoed by Descartes at the end of the *Discourse*: "I have resolved to devote the rest of my life to nothing other than trying to acquire some knowledge of nature from which we may derive rules in medicine which are more reliable than those we have had up till now." [CSM I.151]⁵⁹

Descartes devoted some detailed study and experiment to Galen's medical works [CSM III.81-3], in addition to his well-known dissatisfaction with mathematics, from which he turned for solutions to more fundamental metaphysical questions. But prior to that, in his early quest for a form of certitude he reflected that, "Of all those who have hitherto sought after truth in the sciences, mathematicians alone

⁵⁸ Sanchez. op. cit. p. 171.

⁵⁹ On medicine as the ultimate goal, cf. also CSM I. 143; III. 76, 131, 275, 359.

have been able to find any demonstrations, that is to say, certain and evident reasonings: I had no doubt that I should begin with the very things that they studied." [CSM I.121] Sanchez also arrives at a comparable stage on the road traveled in his pursuit of knowledge: "I had long searched through the realms of physics and mathematics but I had not found truth there. As I continued my investigations into this matter, some men said that truth had established itself in an intermediate zone between the natural and the supernatural worlds, that is to say, in the realm of mathematics."⁶⁰ Henri Gouhier argues that Sanchez may have had an indirect influence on Descartes' early studies while a student at the College of La Fleche in 1606-14.⁶¹ Other scholars have suggested that Sanchez had a more direct impact on the *Discourse* in that Descartes was in Frankfurt in 1619 (several months before the famous dream [CSM I.116]), one year after the publication of the Frankfurt edition of *Quod Nihil Scitur*.⁶²

The similarities between Sanchez' "Preface to the Reader" and Part One of the *Discourse* are striking; Etienne Gilson, in his commentary on the *Discourse* indicates numerous convergences with skeptical writers, particularly Sanchez⁶³. Some of these convergences (not Gilson's) are worth further explication. 1) The fruits of their search are the results of seven (of nine) years gestation for Sanchez; nine years for the *Rules* and eight for the *Discourse*. 2) They were both hungry for knowledge and speak of book-learning as nourishment. 3) But eventually this was unsatisfactory, they withdrew into themselves and began to doubt all that they had learned. 4) Although they admired the conceits and elegant figures in fables and poems, these are misleading in the search for truth and should be avoided in philosophical discourse. 5) Considering the diverse opinions of so many learned men, it is impossible that more than one could have arrived at the truth, and anything probable might as well be considered false. 6) Syllogisms are of little use, for either one already knows the truth of the premises, or one uses sophistical reasoning to convince another of what one is completely ignorant of. 7) The false sciences, such as

⁶⁰ Sanchez, op. cit. "Introduction", p. 48.

⁶¹ Henri Gouhier, *Les Premieres Pensees de Descartes*, Paris, 1958, p. 116.

⁶² Elaine Limbrick, in Sanchez, op. cit. "Introduction", p. 83.

⁶³ E. Gilson, quoted, *ibid.* p. 83, note 48.

alchemy and astrology, are the displays of jugglers and tricksters to persuade you of more than they actually know, and to provide you with a notion that their method for attaining the truth is the same as that of the natural sciences. 8) To construct a science based on an improper method and the mere accumulation of scholastic "proofs" is like erecting a building on an unstable foundation or effecting small repairs on one that's about to collapse.

Despite the striking parallels in the expression of how they came to a search for truth in the sciences, the framework and methodology of the search itself are quite different. Sanchez opens his attack on the proponents of an Aristotelian theory of knowledge with the statement that, if he and his interlocutor are already in disagreement and cannot understand one another, this is because it is not possible to comprehend the nature of *things*, rather every definition and almost every inquiry is about *names*. Throughout his rigorous cross-examination of the dogmatic adherent, Sanchez repeatedly asks questions like, what do you *mean* when you talk about "being" or "nature", etc.: what does it *mean* to say that you know something? If you use syllogistic reasoning to demonstrate that you know some thing about x, although the *form* of your inferences may be correct, the matter or nature of x is not revealed in this process. If you want to predicate some thing of a substance, e.g. "man is rational", you must know more than one thing, but knowledge of singulars is gained only through perception which presents one thing at a time. Hence what you might predicate of some thing depends on what you remember having known in some previous perceptual context; but to remember something is not to understand it. Sanchez's querent then resorts to the Platonic doctrine of reminiscence: that the demonstration of some truth draws out only what you already knew beforehand, when incarnate in some previous soul. But if this is the origin of your memorial knowledge, much the same could be said of that previous soul, and the one before -- which leads to an infinite regress. A similar treatment is accorded to the proposition that knowledge is understanding something by means of its causes, in the sense of efficient and final causes.

There is also an early, and highly condensed, statement of what later became known as the hermeneutic problem.⁶⁴ There are not two kinds of knowledge, one of the things themselves and another

⁶⁴ *ibid.* p. 199-217.

of first principles, but there are two ways in which knowledge can be acquired. One from simple things which are not further divisible, such as matter, form, and spirit; the other of complex things, which are divisible into simple things. Through the analytic understanding of the simples, one can come to knowledge of the complex, but sometimes one can only have known those simples precisely as parts of the complex whole. This is extended by analogy to an understanding of any given single science, which borrows from and contributes to other sciences, and hence can only be known by understanding all the sciences together. This whole-part inter-dependence is used again to show that if man is the union of body and soul, one cannot know the whole without first knowing the two parts, and vice versa.

Sanchez derogates any presumed understanding of words by recourse to etymology, since philology reveals that naming is arbitrary and irrelevant to the essence of things. Nor can human reason be guided by the meaning of observed rituals and customs, since these reveal such an astonishing diversity that there can be no unifying truth behind them. In discussing many of the standard skeptical examples regarding misleading and deceptive appearances, Sanchez compares skepticism to the many-headed Hydra and bemoans the fact that there is no one to vanquish this monster. (See Husserl's image below.) He then analyzes the act of knowing in terms of its functional constituents: the apprehending subject, the apprehended object, and the medium through which the apprehension takes place. In a style similar to the skeptical relativity trope, he shows that each of these is open to such variability in its conditions, that even if one of these were to have a solid purchase on the truth, the other conditions would completely undermine the whole cognitive act.

Descartes' Reaction to the Skeptical Challenge

The unprecedented nature and scope of Descartes' encounter with skepticism in the *Meditations* can perhaps be better appreciated in light of the sort of doubts which contemporary skeptics were promulgating. In the "First Meditation" he is concerned to rid himself of errors and prejudices accepted since childhood in order to establish something stable and lasting in the sciences. He will *not* do so by grappling with each and every skeptical thesis which might have inspired these several errors, but by demolishing the foundations of this "building" which houses such erroneous beliefs - then it will collapse

of its own accord. He has until now accepted the doctrine that knowledge is acquired either from or through the senses, but on some occasions the senses may deceive. Even such obvious sensations as one's bodily dispositions may be doubted by madmen. No sane person would deny that we are sometimes deceived by our senses, but is it impossible that any given perception may be deceptive in such a way that we are not even aware of being deceived? The visions that we have in dreaming are so similar to ones that we have when waking that there are no sure signs by means of which we could distinguish one state from another. But even dream visions are constructed out of shapes and colors which, whatever their imaginary recomposition, are also the real components of the same sort of things to be found in corporeal nature.

One way out of the waking/dreaming dilemma will be to consider that any discipline, e.g. the Galilean science of extended things, which is founded only on math/geometrical truths will be immune to methodical doubt. Regarding assertions beyond this domain, the doubter will withhold assent or suspend judgment in much the same way as he now would treat all his previous beliefs. He will be tempted by habitual opinions to give assent to those beliefs which seem the most probable, but by an act of will he will push them away until they are counter-balanced and the way cleared for perceiving things correctly. In order to bring this about, that is, to counter-balance his powerful conviction regarding knowledge of the math/geometrical domain, he will need an even more powerful doubt. He will thus suppose a malicious demon who systematically deceives him in every belief, including those regarding the existence of his own body, as one of those corporeal things. Is there anything at all of which he could now claim to have indubitable knowledge?

Having extended skeptical doubt from the occasional deceptions of the senses, the relative disposition of the subject's own faculties, and the equivocation of persistent deception in dreaming, to the very being of his own corporeal nature, Descartes has rendered the skeptic speechless. In the "Second Meditation", having appropriated the ground on which to develop a new theory of knowledge, and not just to defend attacks which arise from an *anti-theoretical* position, Descartes will begin to build on this extremely reduced acquisition -- that there is some "thing" which is deceived. The malicious demon can never bring it about that that which is deceived, insofar as it is a deceivable thing, does not exist. Wherein consists this being able to be deceived, that is, this *being*, which is able to be deceived?

What is this *thing* that can be deceived in so many other ways, but cannot be deceived into thinking that it doesn't exist? In order to uncover the nature of this "I", let us consider what it was believed to be before the inception of doubt and then "subtract" any attribute which cannot withstand this rigorous process. If the answer should be "a man", defined as a rational animal (or anything else, for that matter), the doubter is aware that this will lead down "a slippery slope" and he has no time to waste on subtleties of this sort, i.e. the ready-made skeptical queries which lead to circular reasoning. The first *thought* he has regarding his nature is that he has a corporeal body, by which he means a thing with a determinable shape and location. This is a conception of one's own body which is entirely novel and situated in the Galilean universe of extended things organized by the geometric method. And yet all of those features of corporeal body most intimately associated with one's own will not survive the stages of methodical doubt. Only the feature of thinking resists "subtraction" and thus "I am then *in the strict sense* only a thing that thinks." What else, what other features could this thing have?

One cannot rely here on memory since that is the repository of all the prejudices which have been banished and, as well, its contents could have been created *ex nihilo* by the demon. Let us turn then to the other faculties, which I as a thinking being, most assuredly have. Imagination will have to be discounted since that is no more than contemplating the images of corporeal things and is freely able to invent non-existent things (chimeras) which do not even have the minimal feature, being an existent thing, already secured. In turning next to sense perception, Descartes introduces a startling term in a chain of reasons, which does not occur in this context in any previous thinker. Whether awake or asleep, in seeing light, hearing noise or feeling heat, it is still true of these sensations that one *seems* to see, hear or be warmed; and in this restricted sense, seeming is simply being aware of. This seeming is the mere appearance of an object, irrespective (for the moment) of whether it refers in some way or other to an underlying reality. Where the skeptics were so fond of likening the mind to a malleable piece of wax, here it is the appearing wax which will direct the thinker to the invariant essence of a material substance and to a higher-order conception of what it means for a physical substance to have an invariant essence.

According to an entirely subjective point of view, the piece of wax undergoes many changes in shape, taste, temperature, etc. and yet it is grasped, throughout these changes, as one and the same piece

of wax. Sensory impressions are of the wax's many appearances and the imagination is incapable of running through all of those not already presented; and yet this thing is "grasped" as extended, flexible, and changeable. The perception one has of it, or rather the act whereby it is perceived, is a case of "pure mental scrutiny" that is, grasped by the intellect alone. In distinguishing the wax from its outward forms, it's as though it were cognized naked, without its clothes --an ironic reversal of the standard skeptical image of man, "naked, empty and ready for God's grace." Through this analogy, one's understanding of the self is not only more certain than that of a corporeal thing, but also more distinct and evident in that its invariant essence is thinking, and this includes doubting, believing and assenting. The results of the experiment with the wax may be extended to all other corporeal bodies and thus "applied to everything else located outside me" -- the first historical use of this phrase to delimit "external reality" from the purely psychical domain.

The Skeptical Basis of 19th Century Empirical Psychology

Husserl acknowledges, in *First Philosophy*, the Greek Skeptics, Plato and Descartes as the three great beginners in the history of European Philosophy [HUS VII. 7] "Ancient skepticism, begun by Protagoras and Gorgias, calls into question and denies *episteme*, i.e. scientific knowledge of what is in-itself. 'The' world is not rationally knowable; human knowledge cannot extend beyond the subjective-relative appearances. Starting from this point,... it might have been possible to push radicalism further; but in reality it never came to this." Recall Descartes' statement in 1638: "Although the Pyrrhonists reached no certain conclusion from their doubts, it does not follow that no one can." [CSM III. 99] For Husserl in *The Crisis of European Sciences*, the greatest benefit of the skeptical challenge was overlooked by everyone before Descartes, and most of those who came after him did not learn the lesson so indelibly printed in the text of the *Meditations*; his reproach in this matter has an unusually theological overtone.

The skepticism which was negativistically oriented toward the practical and ethical (or political) lacked, even in all later times, the original Cartesian motif: that of pressing forward through the hell of an unsurpassable quasi-skeptical *epoche* towards the gates of the heaven of an absolutely rational philosophy and of constructing the latter systematically. [Crisis. 76-77]

It is highly significant in the development of Husserl's thought after the *Logical Investigations* that the term "epoche" enters his philosophical vocabulary after the publication of Raoul Richter's *Der Skeptizismus in der Philosophie* (1904) and Albert Goedeckmeyer's *Geschichte des Griechischen Skeptizismus* (1905). According to Rudolf Boehm's checking of Husserl's own copies, they show intensive markings of the relevant passages; in addition, Husserl corresponded with Richter on this key term.⁶⁵ Moreover, we now know, due to the recent publication of his private diary for 1906-07, that at this time he went through a serious personal crisis in which all his previous work was subject to severe reassessment.

Husserl finds praise for ancient skepticism in bringing up the problem of subjective conditions for truth and praise for Descartes in his initial treatment of this in the First and Second Meditations. It is in the Third Meditation that Husserl will take exception with Descartes' analysis of the essential constitution of the *res cogitans*. It is this moment in the chain of reasons that will lead Husserl to a radical divergence in his explication of the intentional structure of consciousness and the origin of transcendental subjectivity. Nevertheless, Descartes' overthrow of skepticism was a necessary condition for any progress in the establishment of a *mathesis universalis*.

The novelty of Cartesianism and thus the whole of modern philosophy consists in its fight against skepticism, which in the general course of development remains unsurmounted. Taking it up anew and in an entirely new spirit, Cartesianism actually and radically grasps skepticism in its ultimate principle roots and in so doing finally seeks to overcome it.... With Descartes modernity begins because he first sought to satisfy theoretically the indubitable truth that lay at the basis of the skeptical arguments. He was the first to make theoretically his own the universal field of being, the very one which the extreme skeptical negations presupposed, and turn the argument back on them, namely, on their own certain cognizing subjectivity. [HUS VII. 60-1]

⁶⁵ Herbert Spiegelberg. *The Phenomenological Movement*. 3rd ed. The Hague: M. Nijhoff, 1982. vol. I, pp. 159-60.

The diverse strands of skeptical critique traced thus far -- sensory illusions, the problem of the criterion, the waking/dreaming enigma, diversity of judgments, etc. -- formed a virtual Gordian knot which Descartes would not attempt to unravel, but would sever at one blow. Or in Husserl's metaphor, the skeptical tradition was "the hydra ever growing new heads" [HUS VII. 57], which set Descartes the Herculean task of slaying it once and for all. Myles Burnyeat succinctly poses three questions⁶⁶ which point to this explosive new beginning, stimulated by the press of *skepsis* and allowed to emerge by its demise.

1. How did it come about that philosophy accepted the idea that *truth* can be obtained without going outside subjective experience?
2. When and why did philosophers first claim *knowledge* of their own subjective states?
3. When and why did *one's own body* become for philosophy a part of the external world? [Given that no ancient or modern skeptic ever doubted the *existence* of his own body.]

The answer to all three questions can be found in Husserl's tour-de-force exposition of Galileo's mathematization of nature [Crisis. 21-60] and its consequent splitting of the world into physical bodies, which are subject to causal laws on a geometrical model, and the mental world of humans, which are not only physical bodies but also lived-bodies, and hence not comprehended in this scheme. In a pre-scientific manner, the world is given to each person in a subjectively relative way; each one has his own appearances which count for him in a way in which they don't count for another. But simply because of this, we do not postulate an indefinite number of worlds, but just the one world, filled with spatio-temporal shapes. All these shapes of physical bodies co-exist and belong together in such a manner that there are intuitively given determinate regularities, in terms of which each person may make discrepant observations. The mathematization of this natural world of shapes by Galileo, extended indirectly to other qualities of physical bodies besides extension, allowed the grounding of a science in ideal objects, governed by rigorous laws of causality. The Galilean (and later Newtonian) system uncovered a plenum of self-contained entities or substances whose interconnections could be exhaustively and comprehensively

⁶⁶ M. F. Burnyeat. "Idealism and Greek Philosophy". *The Phil. Review*. (91) Jan. 1982. p. 32.

explicated in a geometrical manner. But what has happened along the way to humans who, aside from being physical bodies (and thus objects) in this plenum, are also the subjects for whom appearances occur within the horizon of open-ended possibilities for knowing?

In his view of the world from the perspective of geometry, the perspective of what appears to the senses and is mathematizable, Galileo *abstracts* [i.e., Descartes' *subtraction* of essential features.] from the subjects as persons leading a personal life; he abstracts from all that is in any way spiritual, from all cultural properties which are attached to things in human praxis. The result of this abstraction is the things purely as bodies; but these are taken as concrete real objects, the totality of which makes up a world which becomes the subject matter of research. One can truly say that the idea of nature as a really self-enclosed world of bodies first emerges with Galileo. A consequence of this...is the idea of a self-enclosed natural causality in which every occurrence is determined unequivocally and in advance. Clearly the way is thus prepared for dualism which appears immediately afterward in Descartes. [Crisis. 60]

The pre-given world of experience has now split into two *new worlds*: the world of nature and the psychical world of its living inhabitants. Just as the ancients, including the skeptics, had no universal science for a closed domain of physical bodies, so also they had no comparable understanding of the psychical domain as a self-enclosed totality of sense-giving constructions. Descartes will accomplish for philosophy what Galileo had mapped out for the physical world: 1) he will demonstrate that "scientific" truth can be found entirely within the realm of subjectivity without recourse to the positing of an "external" world; 2) that knowledge can be obtained from an adequate understanding of the normative character of certain ideas in the psychical domain; 3) and that one's own lived-body (as distinct from the merely physical body), with all its habits, passions and practices, having survived the stages of doubt, can be the "subject" of scientific researches in a manner similar to its physical aspect treated as the object of physiology.

The two separate and distinct substances, *res cogitans* and *res extensa*, now have clearly delimited horizons for investigation. But in this splitting of the world only the geometrical treatment of nature has been established and with this physicalistic model as an exemplar of explanation, "scientific"

research into the psychical domain will attempt to describe its workings in an entirely inappropriate manner. Husserl traces this new discipline, with its tacit acceptance of mind-body dualism, to its origins in the proto-psychology of Hobbes and Locke, from which the naturalization of the psychic descends to the present day. This tracing of a double problematic is why he can describe Descartes as *both* the spiritual mentor of his transcendental phenomenology *and* as "the progenitor of the psychologism which saturates the whole of modern philosophy." [HUS VII.338]

Martial Gueroult would definitely want to defend Descartes from any charges of psychologism even if these charges are the result of misconception of his achievement and a retrospective slight-of-hand in positing a false origin for psychology as a science of introspection. Fortunately for our case, Husserl does *not* accuse Descartes of any such psychologistic interpolation of the nature of consciousness, but of originating a dualistic schema which could be misconstrued in just the way Gueroult describes.

In effect, by substituting ordinary psychological consciousness for mathematico-rational intelligence, as the essence of thought, we are led [by misreading] to see in Cartesian knowledge of self only a pure and simple introspection based on our attentiveness... and we are led to see the *Meditations* as solely an intellectual biography, an account, the history of an experience, etc. We are brought in this way to see the Descartes of the *Meditations* as a psychologist.... One is brought, in addition, to subordinate the main thing to the accessory thing, the basic doctrine to the literary presentation, because of the charge imposed on the philosopher by the necessity to persuade a rebellious reader captured by the imagination. Thus the spirit of Cartesianism is finally destroyed at its roots, a spirit that is not psychological but geometrical, thus a psychologism without rigour is substituted for it.⁶⁷

Just as Descartes felt that he had to demolish his previous convictions, Husserl also felt the need to discontinue his mathematical researches until he had succeeded in reaching a certain clearness on the basic questions of epistemology and in the critical understanding of logic as a science. [LI. 43] The

⁶⁷ Martial Gueroult, *Descartes... According to the Order of Reasons*, trans. by Roger Ariew, Univ. Minnesota Press, 1984, vol. I, p. 47.

exhaustive analyses of empirical psychology of logic comprise the first volume of the *Logical Investigations*: "Prolegomena to Pure Logic". This book-length treatise has a complex structure [HSW.143-47] which can perhaps best be explained by a parallel exegesis of Husserl's principal queries, the answers offered by prior theories of logic, and Husserl's refutation or critique of these. Recent researches⁶⁸ have sought to establish with greater accuracy the historical milieu and scholarly communication between German, English and American exponents of empirical psychology. Schnadelbach⁶⁹ has concisely outlined the emergence of sociology and psychology in the early 19th century German institutional framework and the tremendous influence of the German translation of J. S. Mill's *System of Logic*. "Psychologism in logic, according to which the structure and validity of the principles of logic are based on the organization of the human psyche, can be regarded as the standard opinion of philosophers from the middle of the last century up until well into our own: Gottlob Frege and Edmund Husserl were fairly isolated in their campaign against it." Anton Dumitriu⁷⁰ has cited the origins of this trend at the historical intersection, in the late 18th and early 19th Centuries, of the British empiricist tradition in epistemology and the German neo-Kantian conception of natural science. Martin Kusch's recent work⁷¹ in the academic history of accusation and counter-accusation amongst German philosophers and psychologists has highlighted a serious problem in adequately identifying the alleged character of psychologism.

In Chapter I of the "Prolegomena". "Logic as a Normative and as a Practical Discipline", the theoretical incompleteness of the separate sciences can be remedied by a correct understanding of a

⁶⁸ Allen Hance. "Husserl's Phenomenological Theory of Logic and Overcoming of Psychologism", *Phil. Res. Arch.* (13) 1988; John Metcalfe. "Husserl and Early Victorian Philosophical Logic". *Eidos*. (7) 1988.

⁶⁹ Herbert Schnadelbach. *Philosophy in Germany 1831-1933*. trans. by Eric Matthews. Cambridge Univ. Press, 1984. pp. 72-74; 98-100.

⁷⁰ Anton Dumitriu. *History of Logic*. Abacus Press, 1977. vol. III, pp. 311-52.

⁷¹ Martin Kusch. *Psychologism: A Case Study in the Sociology of Philosophical Knowledge*. London: Routledge, 1995; especially chaps. 1 & 2.

comprehensive and foundational theory of science as logic. Husserl borrows a famous image from Sextus Empiricus⁷² "The setting forth of truths... must reflect the systematic connections of those truths, and must use the latter as a *ladder* to progress and penetrate from the knowledge given to, or already gained by us, to ever higher regions of the realm of truth." [LI.62] In Chapter II, "Theoretical Disciplines as the Foundation of Normative Disciplines", the historically attested fact that logic arose out of practical motives is traced back to the nascent science of the ancient Greeks and their need to repel the attacks of the sophists and skeptics. Scholastic logic still lives under the spell of this tradition, but assuming the role of a false methodology for other disciplines, it entered mistaken pathways and achievements were attributed to it in the late Renaissance for which it was essentially unqualified. Numerous modern proponents of logic as a physical science method are cited, but Husserl echoes Descartes' reaction to the multiplicity of skeptical positions: "We do not intend to assemble and to subject to a critical analysis any and every argument historically advanced for this or that conception of logic." [LI.81] His attention will be focused instead on the basic standard or principle which gives unity to the concept of a normative science.

Chapter III, "Psychologism: Its Arguments and its Attitude to the Usual Counter-Arguments", presents the most controversial thesis for this grounding of logic as a normative science and the sort of principles which give it theoretical unity. This then comprises an introduction to the psychologistic position in the fullest sense, for which Chapters III-VIII provide Husserl with an opportunity to expose the contradictory consequences and the endemic prejudices which result from this position-taking. He quotes from J. S. Mill's highly influential textbook in this context:

Logic is not a science separate from and coordinate with psychology. To the extent that it is a science at all, it is a part or branch of psychology, distinguished from it on the one hand as the part from the whole, and on the other hand, as the art is from the science. It owes all its

⁷² Sextus. op. cit. AL. II. 481.

theoretical foundations to psychology, and includes as much of that science as is necessary to establish the rules of the art.⁷³

For the empirical psychologist, logical thought is unable to think beyond or be applied further than the factual manner in which thinking takes place. This echoes the skeptic who argues that it is not feasible for anyone to claim to know the things themselves irrespective of how they appear to the knower. Charges that this commits a fallacy of circular reasoning, that a science of logic grounded on contingent laws would have to first establish the validity of rules which it presupposes, are no more cogent than the skeptics' resort to charges of circularity in dismissing attempts to establish a criterion. This charge rests on an equivocation in the term "presuppose", that is, to assume the validity of certain rules as premises versus those rules in accordance with which science must proceed.

Both are confounded in our argument for which reasoning *according* to logical rules, and reasoning *from* logical rules count as identical. There would only be a circle if the reasoning were *from* such rules....An investigation may construct proofs without ever having recourse to logic. Logical laws cannot therefore have been premises in such proofs. And what is true of single proofs is likewise true of whole sciences. [LI. 95]

Skepticism and Relativism Remove the Very Basis for Theory Construction

No matter how psychology may be defined -- as the science of psychic phenomena, the facts of consciousness or internal experience, etc. -- three empiricist consequences arise which lead to absurdity, as outlined in Chapter IV. 1. Since psychological laws lack exactness, so will the logical laws founded on them, which is preposterous. Logical laws rely for their continued validity in every possible context on thorough exactness which would be vitiated by any dependence on contingent circumstances. 2. If the response should be to deny that such psychological laws are not vague but are as exact as any other natural law, it is simply not true that a natural law can be known a priori, nor given by insight or intuition. A

⁷³ J. S. Mill. *An Examination of Sir William Hamilton's Philosophy*. 5th ed. London, 1878. p. 461.

natural law can only be established and justified by induction from the singular facts of experience. But induction does not guarantee the holding of the law, only the *probability* of its holding. The probability and not the law itself is justified by insight, and thus logical laws, established in this manner, would be no more than probabilities. This is the same criticism which Descartes directed against the skeptics' founding of mathematical proofs on probable premises. [CSM III. 352]

3. If logical laws have their origin in psychological matters-of-fact, these laws must also be psychological in content, both by being laws for such mental states and by presupposing the existence of such states. But it is patent nonsense to assert that a logical law implies a matter-of-fact of any kind whatsoever, even conscious presentations and the judgments formed therefrom. If the rejoinder should be that logical laws could never have been posited if there were not someone for whom these presentations occurred and who abstracted those basic logical concepts, this is irrelevant since it conflates the psychical components of the *assertion* of a law with the logical moments of its *content*. This leads Husserl to one of the most crucial formulations of his refutation.

Logical laws have first been confused with the judgments, in the sense of acts of judgment, in which we may know them: the laws as *contents of judgment* have been confused with the *judgments themselves*. The latter are real events, having causes and effects. Judgments whose contents are laws are, in particular, frequently operative as *thought motives*... A second confusion is added to the first: we confuse a law as a *term in causation* with a law as the *rule of causation*. In other fields too, we familiarly employ *mythic talk* of natural laws as presiding powers in natural events as if the rules of causal connection could themselves once more significantly function as causes, i.e. as terms in just such connections. [LI.102]

Chapter V, "Psychological Interpretations of Basic Logical Principles", comprises an examination of the specific interpretation of the laws of non-contradiction and the hypothetical syllogism from the psychologistic viewpoint with particular reference to their exposition by David Hume, J. S. Mill, F. A. Lange and Ch. Sigwart. Husserl archly points out that these thinkers have never been afraid of being inconsistent and that it is only through a persistent misunderstanding that this empirical trend has been able to continue. Much as Descartes remarked that skepticism brought to its intrinsic conclusion would

bring about its own downfall, so Husserl comments on psychologism: "To think it out to the end, is already to have given it up, unless extreme skepticism affords an example of the greatly superior strength of ingrained prejudices to the most certain deliverances of insight." [LI. 111]

J. S. Mill's *System of Logic* typifies an exemplary psychologistic explanation for the law of non-contradiction, which applies *mutatis mutandis*, to other logical axioms.

I consider it to be, like other axioms, one of our first and most familiar generalizations from experience. The original foundation of it I take to be, that belief and disbelief are two different mental states, excluding one another. This we know by the simplest observation of our minds. And if we carry our observation outwards, we also find that light and darkness, sound and silence, motion and quiescence, equality and inequality, preceding and following, succession and simultaneousness, any positive phenomenon whatever and its negative, are distinct phenomena, pointedly contrasted, and the one always absent where the other is present. I consider the maxim in question to be a generalization from all these facts.⁷⁴

What an extraordinary statement! -- and one that Carneades or Antiochus could have claimed as their own. "All the gods seem to abandon Mill's otherwise keen intelligence. Only one thing is hard to understand: how such a doctrine could have seemed persuasive." [LI.112] Husserl remarks that all of the factual pairs cited are *not* contradictory propositions and that the concept of exclusion has already entered into the *definition* of the correlative terms, positive and negative phenomena. Mill has substituted for the logical impossibility that the propositions should both be true, the real incompatibility of the corresponding acts of judgment by a thinking person.

In an "Appendix" to his exposition of this psychologistic misconception, Husserl makes an explicit connection between extreme empiricism of this type and extreme skepticism. Both positions destroy the possibility of the rational justification of mediate (i.e. non self-evidential) knowledge and thus completely undermine its own possibility as a scientifically proven theory. His specific demonstration of

⁷⁴ J. S. Mill. *A System of Logic*, 6th ed. London, 1865, vol. I, pp. 309-10; for Descartes' position on non-contradiction, see CSM II, 108.

this is to show that the skeptical attack on the criterion, which reduces its truth claim to a species of fallacious inference, itself appeals to a *petitio principii*.

If however, all proof rests on principles governing its procedure, and if its final justification involves an appeal to such principles, then we should either be involved in a circle or in an infinite regress if the principles of proof themselves required further proof; in a circle if the principles of proof used to justify the principles of proof were the same as the latter, in a regress if both sets of principles were different. [LI. 116]

This is the same line of argument which Sextus' Pyrrhonian advocates will employ to demonstrate the untenability of any standard being used as a criterion of certain knowledge. Similar expositions of the law of non-contradiction are found in F. A. Lange⁷⁵ and Christoph Sigwart⁷⁶, two of the principal exponents of empirical derivation of logical laws.

In Chapter VII, "Psychologism as Sceptical Relativism", Husserl distinguishes two main types of skepticism [LI.135-37], epistemological and metaphysical, both of which he detects as undercurrents in the ancient Greek tradition. In the former type, all such claims as: there is no truth, no knowledge, no proof, etc., depend entirely on the assumption of a position which tacitly denies the conditions for any assertion to be intelligible -- and as such is absurd. There are two sub-types of this skepticism: subjective or noetic and objective or logical. Noetic skepticism violates the subjective conditions of its own possibility as a viable theory since there is no way in which it can distinguish between an evident and veracious assertion and an arbitrary and unwarranted one. Logical skepticism relies on the meaningful use of the notions of truth, judgment, property, relation, etc. and at the same time violates the laws which embrace these notions and without which no theory can have a coherent sense. Metaphysical or inauthentic skepticism, on the other hand, would limit knowledge to what is merely apparent, while denying the

⁷⁵ F. A. Lange. *Logische Studien*. Leipzig, 1877. p. 27 ff.

⁷⁶ Ch. Sigwart. *Logik*. 3rd ed. Freiburg & Leipzig, 1889-93. Band I, sec. 45. English trans. by Helen Dendy. 2nd ed. London & N.Y., 1895. vol. I, p. 297.

existence or knowability of the thing-in-itself. As such, it is not absurd or nonsensical, but it is readily confused with the former variety.

This second main type is not a concern for Husserl in the *Logical Investigations* but will become so after the introduction of the concept of *epoche* or "bracketing" of the given world. (Which as we have seen occurs after his reading of the Pyrrhonian account of suspension of judgment.) This is the world given with all its prejudices, already constructed meaning formations, and other valued products of purposive activities. One of Husserl's pivotal points of departure from Descartes will be focused on that point in the chain of reasons where the thinking subject encounters the world of appearances, a world filled with discrepant perspectives. Instead of working *around* such discrepancies as sense illusions, problems of the dream/waking states, ambiguous meanings, and so forth, they should be *built into* our understanding of this world as the way such things are in fact always already given to us. One of the valued products, so to speak, of this meaningfully structured world is the philosophical diremption of subject and object as distinct substances, and this is the legacy of the Cartesian overcoming of epistemological skepticism.

In order to understand this skepticism as it relates to human subjects (and thus attempts to derive laws of judgment from the species-specific laws of human cognition), Husserl discriminates between individual relativism and human-specific relativism, which he calls anthropologism. The former is such a "bare-faced and cheeky scepticism" that no one has seriously propounded it in modern times. Any person who asserts that his theory of knowledge expresses only his own viewpoint and is only true for him, relegates himself to silence and has nothing further to contribute. All claims derived from the position that the laws of thought are dependent on the particular constitution of human beings qua human are self-canceling and inherently absurd. In this context, the psychologistic doctrine is a collection of statements intrinsically dependent on contingent features of human-specific *psychical* constitution and its factual operations. The "General Introduction" to Sigwart's *Logic* is a cornucopia of this species-specific relativism:

If... we deny the possibility of knowing anything as it is in itself -- if the Existent is only a thought of our production -- it still remains true that the ideas to which we attribute objectivity are those which we produce with a consciousness of necessity. The fact that we regard anything as existing implies that all other thinking creatures of like nature with ourselves... would also be forced with the same necessity to regard it as existing. [And] logical investigations should [not] entirely abstract from and ignore the general nature of the matter and presuppositions of actual thought. Of thought developing entirely from itself in the particular individual we have no knowledge: we know it only under the general relations & conditions, and with the general purposes of human thought.

It is simply not possible for the truth of a judgment to be relative to any given species, such that it might be false for a differently constituted species, since this would render the *content* of what is expressed in the judgment -- which must be the *same* judgment, otherwise it could not be picked out from the other species' discourse -- both true and false. And this consequence violates the sense of the terms "true" and "false" assumed in the original thesis. This thesis is no more correct when the judgment is considered relative to an individual's own mental processes: the concept cannot be construed as a real part of the factual occurrence of a psychical event -- it can be *meant* but not *produced* in one's cognition. In such wise, all attempts to explain the compatibility or compossibility of logical laws on the principles of the association of ideas are doomed to failure, since if this were the case, how could any judgment which denies these laws arise through their actual operation. The restriction of the universal validity of logical laws to human beings or any given subject's cognition must be completely dismissed.

I can compel nobody to see what I see. But I myself *cannot doubt*: I once more see, here where I have insight, i.e. am embracing truth itself, that all doubt would be mistaken. I therefore find myself at a point which I have either to recognize as the *Archimedean point* from which the world of doubt and unreason may be levered on its hinges, or which I may sacrifice at the peril of sacrificing all reason and knowledge. I see that this [the former] is the case, and that in the latter case... I should have to pack in all rational striving for truth, all assertion and all demonstration. [L.I. 159; emphasis added]

⁷⁷ *ibid.* English trans. vol. I, pp. 8 & 14; for Descartes' remarks on non-relative truth, see CSM II, 102.

Husserl's Confrontation with Dilthey's Historicist Understanding

The *Logical Investigations*, first published in 1900, included commentary on virtually all the principal German works in logic to that date, including Theodor Gomperz' translation of J. S. Mill's *System of Logic*. The most notable omission is Wilhelm Dilthey, whose "Ideen zu einer beschreibenden und zergliedernden Psychologie" was published in 1895.⁷⁸ In his "Lectures on Phenomenological Psychology" from 1925, Husserl explains the circumstances under which he had considered it unnecessary to read "Dilthey's great work." [PP.24-5]

The strong tendency toward positivism which Husserl had detected in Dilthey's earlier work, "Einleitung in die Geisteswissenschaften"⁷⁹ put him off any further examination; an inclination reinforced by "Ebbinghaus' brilliant rebuttal" of Dilthey's *Ideen*.⁸⁰ But in later correspondence [HSW.198-209], Dilthey expressed such delight on reading the *Logical Investigations* and claimed such remarkable congruence with his own theoretical conception of psychology, that Husserl was provoked into reading the *Ideen* for himself, as well as the author's later "Der Aufbau der geschichtlichen Welt" (1910) --"the last and most beautiful of his writings". "Dilthey was in fact right with his judgment which had so greatly astonished me, concerning the inner unity of phenomenology and descriptive-analytic psychology. His writings contain a gifted preview and preliminary level of phenomenology." [ibid] It is pertinent then in

⁷⁸ English edition: Wilhelm Dilthey, *Descriptive Psychology and Historical Understanding*, trans. by R. M. Zaner & K. L. Heiges, The Hague, 1977; cf. also, John Jalbert, "Husserl's Position between Dilthey and Neo-Kantianism", *Journal Hist. Phil.* (26) 1988; and Gail Soffer, *Husserl and the Question of Relativism*, Kluwer Academic, 1991, Chapter 1.

⁷⁹ English edition: Wilhelm Dilthey, *Introduction to the Human Sciences*, trans. by R. J. Betanzos, London, 1990.

⁸⁰ Hermann Ebbinghaus' rebuttal appeared in *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, October, 1895.

the context of our overview of Husserl's discussion of skepticism as relativism to consider his postponed treatment of Dilthey.

Dilthey's *Ideen* was "the first assault against this naturalistic psychology [and was] characterized by genius, though also incompletely matured." [PP.3-14] His critique of the rationality of physiological and experimental psychology centers on its explicit emulation of the methodology of the exact sciences, in that this psychology "wants to subordinate the appearances of psychic life to a causal nexus by means of a limited number of univocally determined elements." In order to accomplish this, such a discipline has to construct hypotheses by means of inferences which transcend experience. Such a framework is entirely appropriate to the natural sciences, where sensory experience gives us spatio-temporal things external to consciousness. But this transcendent foundation is entirely inappropriate to the psychical domain which is given only through internal experience. Such knowledge is given through lived experience [*Erlebnis*] in which the individual's own psychic being is constituted by complex intertwinings which belong to every concrete phase of an ongoing psychic life. A teleology or directedness runs through psychic life as such; directed toward happiness, purposeful activities, and valued objectivities which are manifest in the arts, science and religion. A form of psychical causality operates here (motivation) which can be brought to light and made intelligible by an insightful reconstruction of the social-historical context in which the inner-directed meaning was produced. Only through a systematic analysis of such purposeful and meaning-giving activities can psychology distinguish itself from natural science which *explains* physical phenomena, by making intelligible a person's *understanding* of psychical phenomena and its ordered expression in such purposive activities.

In 1911, after the publication of Husserl's "Philosophy as Rigorous Science,' Dilthey wrote to Husserl to clarify his position on historical understanding and to point out that they were in essential agreement in their antipathy to a naturalistic conception of psychology, though Dilthey objected to being considered a skeptic in this regard [HSW. 203] -- in fact, Dilthey characterized his empiricist *opponents* as skeptics. Husserl took some pains to reassure Dilthey that his criticisms in the *Logos* article were not directed at him, and that they had independently arrived at a complementary position in their attempts to overcome a false metaphysics, though from divergent philosophical orientations. [HSW. 207] In fact,

Dilthey in the 1895 *Ideen* had disparaged any attempt to found psychology on the model of the natural and experimental sciences. The second Chapter is devoted to a general survey of results in psychophysical and naturalistic psychology which brings out the repeated failure of specific researchers to achieve the solid and coherent foundation which they had demanded of this emergent discipline: much in the same way that Husserl surveys their collateral work in logic.

The profit in using the hypothetical character of our explanation of nature in the interest of an arid *skepticism*, or a *mysticism* in the service of theology, is cut off. [How similar to Husserl's remark on "natural powers" above.]... Present-day science is caught in the following dilemma, which has contributed enormously to the development of *skepticism* and a superficial and sterile *empiricism*, and thus to the increasing separation of life from knowledge. Either the human studies make use of the foundations which psychology offers... or they strive to fulfill their task without the support of any scientifically ordered view of mental affairs, by depending only on a subjective and equivocal psychology of life. But in the first case, explanatory psychology imparts its wholly hypothetical character to the theory of knowledge and the human studies.⁸¹

Husserl's critique of Dilthey's concept of understanding a meaning-directed act centers on the essential necessity implicit in mental genesis, the origination of expression, and so forth. As much as he praises Dilthey's unprecedented contributions to the first adequate distinction between the natural-scientific and the social-scientific, he deprecates Dilthey's weakness in logical precision and thinking through exact concepts: "he does not penetrate to a clarity of principles concerning its own peculiar sense and the limits of its possible results." [PP. 7] The analytic turning to inner experience and the description carried out in pure internal seeing make possible the understanding of an individual mental act and its product in terms of *its own* inherent necessity in the unified and unifying historical nexus of that given individual. Even granted the most comprehensive and precise understanding of the motivation for *this* meaningful activity, i.e. given such-and-such conditions, this person could only have acted in *this way*.

⁸¹ Dilthey, *Descriptive Psychology*, pp. 26 & 29; emphasis added.

This understanding cannot be construed as *a general* psychical law since it requires contingent factual premises for its interpretation.

A rigorous psychological science will have to be able to account for universal laws *according to* which individual cases, in carrying through a particular instance of lawful necessity, become intelligible. The best scenario, the most valid extension of descriptive "understanding", would be a typology or classification of human cultural, artistic and religious activities. And though this typology is indeed an advance over simplistic, relativist models, it returns the scientific status of psychology to one based on a comparative natural history, whether of personalities, habitual tendencies or associations. Since Dilthey's conception of this new psychology depends on direct seeing in inner experience, itself founded on a universal form of absolutely inviolable necessity -- made use of in projective understanding -- he is confounded in paradox.

The theory of knowledge wants to make intelligible, generically and in principle, how cognitive activity in its psychic interiority can succeed in producing objective validity. But how could it ever solve such a problem if it depended upon a psychological empirical procedure which would supply it with only natural-historical universalities instead of inviolable and intuitively evident necessities? Principles of knowledge cannot possibly be clarified by vague biological universalities of types. Thus in every respect, a psychology which provides necessities is a desideratum. [PP. 13]

Husserl's Refutation of Psychologism Congruent with Descartes' Overcoming of Skepticism

If the previous chapters have drawn out the absurd and counter-sensical consequences of a psychological explanation for logical laws, Chapter VIII turns to an uncovering of its principal arguments in establishing this explanation. Husserl's analysis of the three main "prejudices" point up distinctive convergences with Descartes' treatment of the prejudices inherent in the skeptical attack on knowledge. The first prejudice [LI.168-71] is that prescriptions which regulate what is psychical, including logical laws, must obviously have a psychical basis. It is thus self-evident that the normative principles of

knowledge must be grounded, i.e. must be fully explicable in terms of, the psychology of knowledge which is the science of the psychical basis for any normative expression.

The problem here is that logical laws are not normative propositions whose content informs one how one *should judge*, rather they are laws which depend on normativity for their cognitive content and which *assert* its universal necessity. Those prejudiced in this manner would want to claim that the laws of logic and mathematics have distinctive meaning-content, in contrast to less exact normative rules in other disciplines, which gives them a natural right to regulate our thought. Such a prejudice persuades them to place too much value on the *subjective* aspect of science as the methodology of the human acquisition of knowledge, to the detriment of its *objective* aspect as the coherent ideal of the theoretical unity of truth. Thus "they ignore the fundamental difference between the norms of pure logic and the technical rules of a specifically human art of thought. These are totally different in character in their content, origin and function." [ibid]

In the *Regulae*, Descartes will make a parallel distinction between the "dialectical" protocols which guide our thinking in specific matters and the rules of inference which reasoning must presuppose in order for our thinking to express a true judgment.

If our method properly explains how we should use our mental intuition to avoid falling into the opposite error [undue skepticism] and how we should go about finding the deductive inferences that will help us attain this all-embracing knowledge, then I do not see that anything more is needed to make it complete.... The method cannot go so far as to teach us how to perform the *actual operations* of intuition and deduction, since these are the simplest of all and quite basic. If our intellect were not *already able* to perform them, it would not comprehend any of the rules of the method, however easy they might be. As for other *mental operations* which dialectic claims to direct with the help of those already mentioned, they are of no use here, or rather should be reckoned a positive hindrance, for nothing can be added to the clear light of reason which does not in some way dim it. [CSM I, 16; my emphasis]

The second prejudice [LI, 177-84] is not confined to logical laws but extends also to mathematics. According to this, logical demonstrations are concerned with syllogisms and proofs, truth

and probability, ground and consequent, etc. and as such what they refer to can only be manifested or experienced in judgments. This manifestation can only take place as the content of a psychical event, and psychology provides a coherent and reliable account of how these psychical events take place. Husserl's dismissal of this further attempt to rehabilitate a psychological grounding for logical laws employs a mathematical analogy regarding counting and number. The psychical act of counting takes place with respect to a possible concrete *object* of presentation, whereas number and numerical operations refer to *ideal species* whose concrete instances are found in what becomes objective in certain acts of counting. Numerical concepts (as well as logical terms) which constitute math/logical laws have no empirical range, but are exclusively one of ideal singulars and genuine species. The second prejudice is no more than a subterfuge to reintroduce validity into psychologistic explanation which had already been unmasked in the previous exposition of the crucial distinction between the factual occurrence of a judgment and the essential content expressed through the judgment.

The third prejudice [LI. 187-96] relates to the *feeling* of inward evidence or a conviction of the certitude which accompanies the psychical act directed towards a logical truth. As an observation on the sort of cognition which takes place in the logician's construction of an inference, for instance, this feeling may have some heuristic value, but it is another thing to claim that the presence of this feeling somehow *guarantees* the truth of the judgment to which it is attached. Practical directions which assist in picking out the occurrence of such evidential indices may in fact lead one to achieve judgments and construct inferences which are indeed certain and valid, but this is incorrectly extended to an explanation of the *grounding* of such logical laws as certain and valid. Sigwart gives an exemplary statement of this position:

The possibility of determining the criteria and rules of necessary and universally valid procedure in Logic depends upon our ability to distinguish objectively necessary thought from that which is not necessary, and this we find in the *immediate consciousness* of evident truth which accompanies necessary thought.... There is, in the last instance, no answer but an appeal to our subjective experience of necessity, to the *inward feeling* of certainty by which some of our thought is accompanied, to the consciousness that, starting from the given premises, we cannot think otherwise than we do think. Belief in the truth of this feeling and in its trustworthiness is

the last anchorage of all certainty: for the man who does not acknowledge it there is no knowledge -- nothing but accidental opinion.⁸²

The striking parallel between this psychologistic explanation for certainty and validity and the position of the 16th Century Protestant reformers' doctrine of "inner persuasion" can be illuminated by replacing "logical law" with "religious claim" (in the above passage) and reading a theological connotation for the term "thought". Just as Calvin⁸³ would be unable to refute charge of circularity in his appeal to "inner persuasion" as the criterion in determining a conflict of interpretations in theological doctrine, so also the empiricist logicians were unable to see the commission of a *petitio principii* in the specious grounding of logical truth on a feeling of conviction.

Husserl's refutation admits that every law of pure logic does permit an inwardly evident *transformation* in the psychical domain which allows one to isolate the conditions of inward evidence. It is true, for instance, that one and only one of two mutually contradictory judgments can manifest inner evidence, because one and only one can be true. But the inner evidence of these sorts of judgments does not depend on *psychological* conditions, which are contingent and external to the judged content, but on *ideal* conditions.

Each truth stands as an ideal unity over against an endless, unbounded possibility of correct statements which have its form and its matter in common. Each actual judgment, which belongs to this ideal manifold, will fulfill... the ideal conditions for its own possible inward evidence. The laws of pure logic are truths rooted in the concept of truth, and in concepts essentially related to this concept. They state, in relation to possible acts of judgment, and on the basis of their mere form, the ideal conditions of the possibility or impossibility of their inner evidence. [LI. 192]

For Descartes, it is not possible to clearly and distinctly perceive an unclear and indistinct idea, though it is possible, under specifiable conditions, to not clearly and distinctly perceive what would

⁸² Ch. Sigwart, *Logic*, vol. I, pp. 14-15.

⁸³ R. H. Popkin, *History of Skepticism*, pp. 8-10.

constitute a clear and distinct idea. It is not an act of self-reflection which *confers* clarity and distinctness, but by means of self-reflection, the clarity and distinctness of what is thought in the thinking act can be brought forth. Such self-reflection uncovers the originary manner in which only clear and distinct ideas can be presented. The subject matter towards which our cognitive seeing is turned may be obscure, but this obscurity can itself become firmly grasped as that which must be abstracted in order to cognize (and hence judge) clearly and distinctly. The formal reason which induces one to assent to such an idea consists in a certain inner light which is divinely inspired, and when one's cognition is illumined by this, *there* is the guarantee that what one assents to, in clear and distinct seeing, is indeed a clear and distinct idea. [CSM II, 105] This "objective perfection" manifest through the natural light as guarantee of the clarity and distinctness of that which is cognitively seen is very close indeed to Husserl's concept of apodictic (or perfect) evidence, which discloses itself to critical reflection as having the unique feature of being the absolute inconceivability of its non-being and thus excluding every doubt as object-less and empty. And this closeness in the treatment of the meaning of logical laws is the direct result of their congruent treatment of that *skepsis* which provoked a radical rethinking of the grounds and conditions for a philosophy which aspires to a scientific certitude.

CHAPTER 3
ORDER OF REASONS *versus* ORDER OF ESSENCES, or
SCIENCE'S BUILDING AND PHILOSOPHY'S PATH

"Some years ago I was struck by the large number of falsehoods that I had accepted as true in my childhood, and by the highly doubtful nature of the whole edifice that I had subsequently based on them. I realized that it was necessary, once in the course of my life, to demolish everything completely and start again right from the foundations if I wanted to establish anything at all in the sciences that was stable and likely to last." [CSM II, 12]

The opening lines of the *Meditations* and one of the most famous incipits in modern philosophy; from this will be launched a ground-breaking revolution in 17th century thought. And embedded within these lines is the most persistent and significant of all the philosophical metaphors which Descartes will employ from the *Rules* (1627) to the *Principles* (1644-47). To liken the construction of grounded scientific knowledge into a coherent whole to the architecture of a building is a clear and succinct metaphor and, in many instances, functions as no more than a rhetorical device or figure of speech. And yet his recurring commitment to this image elevates it to the status of a thematic concern, and this for three reasons.

First, in almost every instance, the building metaphor is coupled with the contrasting figure of the path or the way which one must take in the process of philosophizing in this new manner, that is, the one unfolded in the *Meditations* itself. Second, that if in many cases this has seemed to be no more than a rhetorical figure, in the Seventh Replies to Bourdin's Objections, he states that, "throughout my writings I have made it clear that my method imitates that of the architect." [ibid. II, 366] For twenty-four pages (in the Adam-Tannery edition), Descartes recapitulates the stages of his philosophical enterprise in great detail, equating each to a stage in the construction of a great building. And third, the building and path metaphors are an expository or literary analogue for the format of presentation, better known under the rubrics order of essences and order of reasons.

As a rhetorical device, the building metaphor was not original or unique to Descartes and, like Sextus' image of the "ladder" of syllogisms, had found its way into contemporary writers' discussion of

method, that is, as the elaboration of a coherent and self-contained corpus of knowledge. Sanchez' concerted attack in *Quod Nihil Scitur* (1584) on the scholastic followers of Aristotle concluded with this sustained analogy to a crumbling building:

They never stop writing them [treatises on dialectic], revealing new collapses every day, like some ancient building that keeps threatening to fall down, or else one built on sand and an unstable site, with foundations made up of fragile materials; a building that must be continually shored up with wooden props, or reinforced with stone, mortar, and so forth, since cracks keep continually opening in its structure on this side or that. Just so, as the syllogistic discipline continually crumbles... its inhabitants and craftsmen continually struggle to prevent it.¹

The "Announcement" which opens Francis Bacon's *Instauratio Magna* (1620) sets the stage for his comprehensive taxonomy of the sciences in these terms:

Human knowledge itself, the thing employed in all our researches, is not well put together nor justly formed, but resembles a magnificent structure that has no foundation. And whilst men agree to admire and magnify the false powers of the mind, and neglect or destroy those that might be rendered true, there is no other course left but, with better assistance, to begin the work anew, and to raise or rebuild the sciences, arts and all human knowledge from a firm and solid basis.²

If this image characterizes the poorly built and groundless structure of accumulated knowledge, oblivious to errors and prone to prejudices, so also its opposite typifies the results of scientific researches conducted according to proper methods and eschewing all previously unexamined conclusions. However, Bacon in the next paragraph employs a different image to characterize the point-of-view of the inaugurator of this

¹ Fr. Sanchez. *That Nothing is Known*, op. cit. p. 275.

² Francis Bacon. *The Physical and Metaphysical Works*, ed. by Joseph Devey, London: George Bell, 1889, pp. 1 & 2; next quote *ibid.* Descartes approved of the Baconian program for the recording of astronomical observations, Letter to Mersenne, May 1632, CSM III, 38.

new scientific enterprise, and those who carry out its programme, in terms of the philosophical process by which such results are achieved.

He thought it not right to desert either the cause or himself, but to boldly enter on the way and explore the only *path* which is pervious to the human mind... For it is wiser to engage in an undertaking that admits of some termination, than to involve oneself in perpetual exertion and anxiety about what is interminable. The ways of contemplation indeed, nearly correspond to two *roads* in nature: one of which, steep and rugged at the commencement, terminates in a plain; the other, at first view smooth and easy, leads only to huge rocks and precipices. [emphasis added]

Parallel to the late 16th and early 17th century philosophical confrontation with the resurgence of Greek scepticism, from Montaigne to Pierre Bayle, was the struggle in astronomy to establish and validate the heliocentric model first promulgated by Copernicus in 1543, though circulated amongst his friends as early as 1510. Though formulated as an explanation of the actual workings of the celestial bodies, the printed edition was prefaced with a statement by Andreas Osiander that Copernicus' theory was no more than a mathematical hypothesis, and as such could not come into conflict with the tenets of the Christian Faith.³ Though written perhaps with the best intentions, to spare Copernicus from the presumed interdiction of the Papal Curia, it had the unfortunate though short-lived effect of reducing Copernicus' discoveries to the status of one unfounded claim competing against other disparate claims.

With the proviso that it is only a mathematical hypothesis, the heliocentric model could have been counterpoised against any other model in the same way in which, for example, the Stoics confronted the Sceptics with regard to the problem of the criterion. With good fortune though, most of the significant astronomers from the mid-16th century until Galileo, ignored this spurious disclaimer and considered this model as the only theory which could adequately *explain* both observable phenomena and as yet undisclosed consequences, e.g. the discovery of other planets. This was in contrast, of course, with competing geocentric theories which *saved* only the observable phenomena and had to readjust their basic premises when confronted with emergent elements. Several notable figures in this period felt obliged,

³ A. C. Crombie, *From Augustine to Galileo*. London: Heinemann, 1970, vol. II, pp. 174-85.

however, to counter Copernicus' detractors on their charge that it was no more than an hypothesis. Kepler was inveigled by Tycho Brahe to defend the elder famous astronomer against the mathematician Nicolai Baer (pseudonym "Ursus") who had attacked Tycho's work using many standard skeptical arguments.⁴

Kepler's *Defence of Tycho Against Ursus*, written in 1600, though not published until much later, bears serious comparison with Descartes' *Discourse on the Method* for several reasons.⁵ Kepler's defence does not rely in any way upon the usual scholastic terminology or arguments in its construction of an epistemological framework in which to situate the results of astronomical observations. It is directed against any possible skeptical assault, and not just Ursus' criticisms, on a scientific theory which would construe such a theory as a mere position-taking open to equal-weighted counter-hypotheses. It also demonstrates an unprecedented comprehension of previous astronomical theories in terms of the historiography of scientific thought, and its general method is to begin with axiomatic first principles from which all further postulates could be derived.

Kepler opens the first Chapter by remarking that Ursus "writes as if hypotheses had been established merely for the amusement of mankind": that they do not have any greater epistemic weight than a fiction or literary invention. Kepler's first task then is to correct this misconception of the meaning of hypothesis by a comparison of this concept with that which is used by geometers. One is reminded here of Sanchez's attempt in *Quod Nihil Scitur* to elucidate an intelligible meaning for the term "knowledge".

Before the birth of logic as a part of philosophy, when they [the geometers] wanted to expand their demonstrations by the natural light of the mind, they used to start their teaching from some established beginning. For in *architecture* the builder is content to lay down foundations below the ground for the future mass of the house, and he does not worry that the ground below might shift or cave in. Just so in the business of geometry, the first founders were not, like the Pyrrhonians who followed later, so obtuse as to want to doubt everything and to lay hold on

⁴ N. Jardine, *The Birth of History and Philosophy of Science*. Cambridge, 1988, pp. 9-28.

⁵ "In the *Dioptrics* and *Treatise on Man*, Descartes took over Kepler's revolutionary theory of vision in a suitably mechanized form [which] Kepler had shown in *Ad Vitellionem Paralipomena* (1604)." John Schuster, "Descartes' Mathesis Universalis", in *Descartes: Phil. Math. & Physics*, Stephen Gaukroger (Ed.) Harvester Press, 1980, p. 61.

nothing upon which as a *foundation*, sure and acknowledged by all, they would wish to build the rest.⁶

One possible source for this immensely popular rhetorical figure is Demosthenes' *Oration*s, a standard Greek text for university students of the period. *Scientia* as an edifice would almost certainly have been as familiar to literate readers as Sextus' ladder of syllogisms or Ariadne's thread through the labyrinth. It occurs early in Demosthenes' text, in the Second Olynthiac Oration: "It is impossible to acquire a solid power by injustice and perjury and falsehood. Such things last for once or for a short period.... As a house, a ship, or the like, ought to have the lower parts firmest, so in human conduct the principle and foundation should be just and true." Amongst other suggestions as to the origin of this image, Dalia Judovitz claims that "Descartes' architectural metaphor is based on the passage in the Republic [Book VI, 501a] where Plato compares the construction of the perfect city to the work of a painter using a divine model... For Descartes, the perfect city is no longer built on a divine model, but rather on a self-made and self-invented rational model."⁸

An even more likely source, however, is in Galen's *Ars Parva*, one of the most popular medical works of the Renaissance, and an author whom Descartes had thoroughly studied. [CSM III, 81-3] Galen argued that medicine was one of the productive arts [*technē*] and compares it to architecture or the building of houses. Just as one comes to understand the finished house by means of analysis, one understands the human body through anatomy. However, physicians differ from housebuilders in having to understand not only the parts of their subject matter, insofar as the parts make up the whole, but also the operations or functions of each of the parts considered on its own.⁹ In this genealogy of rhetorical imagery, one should also bear in mind that throughout 16th and 17th century discussions of method, the

⁶ Jardine, *op. cit.* p. 137; emphasis added.

⁷ Demosthenes, *Oration*s, trans. by C. R. Kennedy, London: J. M. Dent, nd, p. 129.

⁸ Dalia Judovitz, *Subjectivity and Representation in Descartes*, Cambridge Univ. Press, 1988, p. 104.

⁹ Neal Gilbert, *Renaissance Concepts of Method*, Columbia Univ. Press, 1960; for his synopsis of Galen, see pp. 17-25.

writers concerned were aware of its etymology in ancient Greek texts. Aristotle and Plato usually employed this term in its ordinary sense: *meta - odos*, "to follow the path". If in Plato, this indicated the dialectical structure of discourse, in Aristotle this concept is refined to a definite manner of enquiry about any province of knowledge, *via ac ratio inquirendi*.¹⁰

For Descartes, the general sense of the building image is the aggregate of inter-related knowledge claims about a specific subject matter, e.g. the human body, the celestial spheres, or the origin and domain of *scientia*. He usually employs this image to typify the sort of dogmatic, uncritical position held by other theorists and usually with derogatory connotations, with the obvious exception of the Seventh Replies. On the other hand, the general sense of the path image refers to the ongoing activity of the philosopher, having stripped himself of prejudices and abstained from the uncritical acceptance of any particular doctrine. This is the most common manner in which he talks about his own philosophical activity and thus admonishes those who either cannot or will not follow along with him.

The first use of the path image is in Rule II of the *Rules* and here it may be an oblique reference to the excesses of ancient skepticism. "Perhaps without guidance they might head towards a precipice, but so long as they follow in their master's footsteps (though straying at times from the truth), they will surely hold to a course that is more secure." [CSM I. 11] He may have had in mind the well-known stories told about Pyrrho himself, whose associates had to traipse around with him in order to prevent him being run over by carts or falling over cliffs.¹¹

It was in the context of pointing out the absurdities inherent in the complete withholding of assent to appearances that Aristotle remarked: "For why does a man walk to Megara and not stay at home, when he thinks he ought to be walking there? Why does he not walk early some morning into a well or over a precipice, if one happens to be in his way? Why do we observe him guarding against this, evidently because he does not think that falling is equally good and not good."¹² Walking toward a precipice is the

¹⁰ *ibid.* pp. 39-45.

¹¹ Diogenes Laertius. *Lives of the Philosophers*. Book. IX. sec. 62.

¹² Aristotle. *Metaphysics*. 1008b.

result of allowing skeptical doubt to spill over into everyday affairs, something which Descartes repeatedly cautions against. But it is also the result of not following the right path, or not following the path in the right manner.¹³

For the student to follow someone about for no better reason than that his guide is accorded the status of pathfinder is as risky as being a disciple of Pyrrho or any other person who does not observe moderation in doubt.

So blind is the curiosity with which mortals are possessed that they often direct their minds down untrodden paths, in the groundless hope that they will chance upon what they are seeking; rather like someone who is consumed with such a senseless desire to discover treasure that he continually roams the streets to see if he can find any that a passer-by might have dropped. This is how almost every chemist, most geometers, and many philosophers pursue their research.
[CSM I. 15]

He is equally disparaging of those who transfer or re-employ this haphazard process of finding the truth to their elaborate construction of models which incorporate those truths. Those ignorant of proper scientific method:

Frequently examine difficult problems in a very disorderly manner, behaving in my view as if they were trying to get from the bottom to the top of a building at one bound, spurning or failing to notice the stairs designed for that purpose. Astrologers all do likewise.... those who study mechanics apart from physics. ... [and] those philosophers who take no account of experience.
[CSM I. 20-1]

Rule XII includes the first mention of what will later become the crucial distinction between analytic and synthetic methods of exposition. It is not germane to our present concern with the building/path metaphors to undertake a review of the complex ancestry of synthesis and analysis from its

¹³ On the subject of percipitancy at precipices: "It seems so easy, following Descartes, to lay hold of the pure ego and his cogitations. And yet it is as though we were on the brink of a precipice, where advancing calmly and surely is a matter of philosophical life and death." Husserl. CM. 23.

origins in the fourfold methodology of Aristotle's *Organon*.¹⁴ It is enough for our purpose that the conceptual distinction between *ordo rationarum* and *ordo essendi* corresponds with the rhetorical figures of the path of first philosophy and the building of the sciences. "When we consider things in the order that corresponds to our knowledge of them, our view of them must be different from what it would be if we were speaking of them in accordance with how they exist in reality." [ibid. I. 44] The fullest explication of this correspondence will become apparent in the maturation of Descartes' thought through the *Discourse*, the *Meditations*, and the *Passions of the Soul*.

In a Letter to Mersenne of April 1630, after abandoning work on the *Rules*, he describes an abrupt change of direction in these terms: "I was forced to start a new project [*The World*] rather larger than the first [*Rules*]. It is as if a man began building a house and then acquired unexpected riches and so changed his status that the building he had begun was now too small for him. No one could blame such a man if he saw him starting to build another house more suitable to his condition." [CSM III. 21] Although he is confident and re-assures Mersenne that he will not change his mind again, he could not have foreseen the condemnation of Galileo's *Two New Sciences*, which he learned about while working on *The World*. Ironically then, he does have to vacate this house, and after an interim period, make another assay at building a suitable structure, in the *Discourse on the Method*. Part One opens with a sketch of the author's education and travels, including a summary estimation of ancient writers' positions on science and ethics.

I compared the moral writings of the ancient pagans to the very proud and magnificent palaces built only on sand and mud.... As for the other sciences, in so far as they borrow their principles from philosophy, I decided that nothing solid could have been built upon such shaky foundations. Neither the honour nor the riches they offered was enough to induce me to learn them. [ibid. I. 114-5]

¹⁴ On the importance of synthesis and analysis in the *Rules*, see Stephen Gaukroger, *Descartes: An Intellectual Biography*, Oxford, 1995, pp. 124-6.

However, in the practical domain so often demarcated by Descartes from the abstract and metaphysical discipline of the philosopher, he commends the right following of the path in everyday affairs. The moral maxims adduced in Part Three of the *Discourse* are only the most famous example of his careful segregation of metaphysical certainty from practical common sense. "It is not enough to have a good mind, the main thing is to apply it well.... Those who proceed but very slowly can make much greater progress, if they always follow the right path, than those who hurry and stray from it. [ibid. I. 111]

The first thematic presentation of the dual metaphor, in contrast to a mere rhetorical figure, occurs immediately after his cryptic mention of the famous dream of November 1619. This context perhaps is not so surprising since "the path" is one of the key motifs of the famous dream itself. At one point a mysterious figure enters his chamber and displays a book open to a poem whose title is *Quod vitae sectabor iter?* (What path in life shall I follow?) The dreamer interprets this not only as a moral maxim, but also as part of his "marvellous discovery" on the road towards a new science.¹⁵ Amongst his initial thoughts after the dream was the realization that there is greater perfection in any given work, whether material or abstract, if it is the result of one person's efforts rather than many working together. "Thus we see that buildings undertaken and completed by a single architect are usually more attractive and better planned than those which several have tried to patch up by adapting old walls built for different purposes." [ibid. I. 116] In this extended treatment several important analogies are drawn. Ancient cities which have grown gradually from small villages to large urban centres display disorderly and haphazard arrangements of buildings and streets, in contrast to newer cities which are planned as a whole in advance of their construction. Jean-Joseph Goux comments on this:

On voit que Descartes fait sien le principe sur lequel est fondé l'urbanisme moderne, celui d'une *destruction* suivie d'une *reconstruction* suivant un plan d'ensemble, principe tout à fait opposé à la méthode médiévale de la refectio progressive, ou de la croissance fragmentée. Cette pratique

¹⁵ There have been many attempts to interpret Descartes' dream; for a perspicacious and ingenious recent account, see Gaukroger, *ibid.* pp. 106-11

moderne repond a la croyance en un point de vue capable d'organiser d'un seul coup, sans modification ulterieure possible, un systeme complet d'edifices.¹⁶

As a corollary, Descartes observes that those societies which have grown gradually from half-savage to civilised bring in new laws on an ad hoc basis, i.e. only according to circumstances, in contrast with those states where a single wise law-giver has thought out all the basic laws, embodied perhaps in a constitution. A second corollary pertains to religious doctrines which are comprised in the true religion (Christianity), articulated by the one true god alone, where the pagans had to contend with a multitude of conflicting deities. And a third corollary from this initial image pertains to the corpus of alleged scientific knowledge contained in textbooks, the accumulated sediment of many researchers cobbling things together on the basis of their predecessors' works.

He is convinced that in the ethical conduct of his own life and in the metaphysical domain of the philosopher, it is far better to start from first principles and then proceed to more complex problems. Public institutions, which one would encounter in practical affairs, are an obvious example of social structures which are so cumbrous and unwieldy that they cannot be rectified: custom alone will smooth away these excrescences.

It is almost easier to put up with their imperfections than to change them, just as it is much better to follow the main roads that wind through the mountains, which have gradually become smooth and convenient through frequent use, than to try to take a more direct route by clambering over rocks and descending to the foot of precipices. [ibid. I. 118]

In the next paragraph, he chastises those headstrong persons who never have the patience to carefully consider the issues and order their thoughts. "If they once took the liberty of doubting the principles they accepted and of straying from the common path, they could never stick to the track that must be taken as a shortcut, and they would remain lost all their lives." [ibid.] He may here have had in

¹⁶ Jean-Joseph Goux, "Descartes et la perspective", in *L'Esprit Createur*, vol. 25, no. 1 (1985), p. 11. See also this famous image, "Our language can be seen as an ancient city: a maze of little streets and squares, of old and new houses, and of houses with additions from various periods; and this surrounded by a multitude of new boroughs with straight regular streets and uniform houses." Wittgenstein. *Phil. Invest.* sec. 18.

mind Thomas Campanella, the author of *De Sensu Rerum* (1620), of whose writings he remarked in a letter to Huygens of March 1638: "that to go astray through fondness for the most out-of-the-way paths is less excusable than to follow the well-trodden ones." [ibid. III. 91] This synoptic criticism is very similar to one about Galileo's *Two New Sciences* (1638) in a Letter to Mersenne of October 1638:

He has not investigated matters in an orderly way and has merely sought explanations for some particular effects, without going into the primary causes in nature; hence his *building* lacks a foundation. Now the closer his style of philosophizing gets to the truth, the easier it is to recognize its faults, just as it is easier to tell when those who sometimes take the right *road* go astray than it is to point out aberrations in the case of those who never begin to follow it. [ibid. III. 124-5; emphasis added]

Here Descartes' metaphors of the building and the path have become quite overt in their intention, or perhaps one could say, their latent meanings have risen to the surface. He equates a building with an ordered model of acquired knowledge and a path with the style or activity of philosophizing.

Descartes himself was in "two minds" (so to speak) about the manner in which to present his thoughts to the reading public, in this his first published work. His worry about this is expressed to several correspondents at this time; whether to proceed in the customary fashion, from topic to topic in an ordered, systematic whole, or to initiate his readers into his train of thought stage by stage in a gradual unfolding. To Mersenne in February 1637: "I was afraid that weak minds might avidly embrace the doubts and scruples which I would have had to propound and afterwards be unable to follow as fully the arguments by which I would have endeavoured to remove them. Thus I would have set them on a false path and been unable to bring them back." [ibid. III. 53] And to Vatier in February 1638, on his reasons for the "shocking" format of the proofs given in the *Discourse*: "First, believing that I could deduce them in due order from the first principles of my metaphysics, I wanted to ignore other kinds of proofs; secondly, I wanted to see whether the simple exposition of truth would be sufficient to carry conviction without engaging in any disputes or refutations of contrary opinions." [ibid. III. 87] In our discussion of Descartes' confrontation with skepticism, it has been shown that he was quite deliberate in not countering

each and every skeptical trope with an equal-weighted trope: this is the standard skeptical practice of *isosthenia*, "engaging in disputes or refutations". His "shocking" and "strange" procedure is to encourage the reader to follow the philosopher's thinking along a single path, from the most basic and evident insights and thus, little by little, to more complex truths.

Such a ground-breaking procedure -- in the literal sense of razing an extant edifice in order to begin building anew -- is not without its own dangers and obstacles. And moreover what is disclosed in this process, if not unexpected, will most likely be entirely mysterious. From the point of view of one setting out to accomplish this task, it is as if he were alone and in the dark, searching for the path.

Like a man who walks alone in the dark, I resolved to proceed so slowly, and to use such circumspection in all things, that even if I made but little progress I should at least be sure not to fall. Nor would I begin rejecting completely any of the opinions which may have slipped into my mind without having been introduced there by reason, until I had first spent enough time in planning the work I was undertaking and in seeking the true method of attaining knowledge of everything within my mental abilities. [ibid. I. 119]

Descartes' solitary imagery in this passage may have derived some of its flavour from an influential Italian theorist of method, Girolamo Borro. His primary work, *A Defence of the Peripatetic Method of Teaching and Learning*, was published (in Latin) in Florence in 1584, and thus contemporaneous with Francisco Sanchez. Neal Gilbert has shown that Borro certainly had an influence on Galileo and others in this period, and there is no reason to think that Descartes would not have been familiar with such a widely-read writer on method.

In order that this method be uprooted from Aristotle's works in which he conceals hidden things, anyone who eagerly makes an attempt of this thing has to be this first and foremost: that he surely has the notion to grasp the method to be uprooted, which if otherwise followed, he wanders about through thickest and darkest shadows of stormy night, uncertain what he searches for or where he travels.¹⁷

¹⁷ Gilbert, op. cit. p. 192, note 46; my literal trans.

Another significant occurrence of this dual metaphor in the *Discourse* is at the point where the author is about to introduce his provisional moral code, again an entirely practical concern. Having adopted the position incurred by methodical doubt, although he may be obliged to remain indecisive on intellectual matters, he cannot be indecisive in the practical "business" of conducting his own life. "Now before starting to rebuild your house, it is not enough simply to pull it down, to make provision for materials and architects (or else train yourself in architecture), and to have carefully drawn up the plans." This is a clear-cut reference to his avowed intent to demolish the accepted scheme of scientific knowledge in order to rebuild it according to a coherent design. "You must also provide yourself with some other place where you can live comfortably while building is in progress." [ibid. I. 122] As he remarks on numerous occasions, he is not adverse to employing a probabilistic model of decision-making in practical affairs. If his first maxim is to obey the laws and customs of his country, his second maxim is to be as firm and decisive in his actions as possible, i.e. to consistently maintain a definite course of action, even if this should turn out to have been improper or incorrect.

In this respect, I would be imitating a traveller who, upon finding himself lost in a forest, should not wander about turning this way and that, and still less stay in one place, but should keep walking as straight as he can in one direction... for in this way, even if he does not go exactly where he wishes, he will at least end up in a place where he is likely to be better off than in the middle of the forest. [ibid. I. 123]

The usage of the building and path images before the *Meditations* is thus more than that of mere figures of speech. He returns to the building metaphor again and again to characterize both his own uncritically accepted youthful opinions, taken as a body of spurious knowledge, and to denigrate the so-called scientific edifice of others' theories, pieced together from what is at hand -- something the French would call *bricolage*.¹⁸ He refers again and again to being lost on a path, or not being on the right path,

¹⁸ On *bricolage*, see Claude Levi-Strauss, *The Savage Mind*, London, 1972, pp. 16-22.

where wandering about in an arbitrary manner one can expect the same sort of results as one would have if a building were constructed in this fashion. In this respect the two images merge: he is not opposed to building *per se*, as long as it is done in the right order, and as long as one does not confuse it with following a path. On the other hand, he repeatedly enjoins those who wish to pursue philosophy to follow the right path, as long as they don't convert this process into a static edifice. It is with this understanding of the fundamental incompatibility of these two formats that the dual rhetorical trope points to a profound philosophical issue, the distinction between *ordo rationarum* and *ordo essendi*. If these latter methodological concepts have not been fully explicated before the *Meditations*, the building/path metaphors serve as a preliminary sketch of this already accepted dichotomy.

Let us return then to the opening lines of the *Meditations*, more fully cognizant of the mature import of references to buildings or edifices and paths or roads. Having been struck by the falseness of many youthful opinions and the dubiousness of the whole edifice of alleged *scientiae* based on them, it is necessary once (and not more than once) to raze this edifice to the ground. Only if the ground has been cleared will it be possible to build again, to build a coherent and well-ordered *scientia* which is stable and long-lasting. There is no point in renovating any extant edifice, as his work in the *Rules* and the *Discourse* made apparent, since the basic principles or foundations of these buildings are completely undermined without the prior benefit of a proper method. At this point, let us interpolate Husserl's comments on Descartes' enterprise and his own choice of imagery in characterizing this ground-breaking ambition.

In a bold, even extravagant, elevation of the meaning of universality, begun by Descartes, this new philosophy seeks nothing less than to encompass, in the unity of a theoretical system, all meaningful questions in a rigorous scientific manner.... Growing from generation to generation and forever, this one edifice of definitive, theoretically inter-related truths was to solve all conceivable problems -- problems of fact and of reason, problems of temporality and eternity.
[Crisis. 8-9]

Descartes' specific contributions to this entirely new structure, one which is grounded on indubitable principles, have been the *Treatise on Man* (physiology), and the three essays appended to the *Discourse*: Optics, Geometry and Meteorology. The experimental results and the verifiable theorems contained in these works have been made possible by the radical method first outlined in the *Rules* and Part Two of the *Discourse*. But in order to explain how he has arrived at these first principles and what constitutes their primacy, he has now decided not to adopt the format evinced in these earlier topical treatises. Rather, this showing the way to his radical point of departure will take the form of meditations, of which a precursor is found in Part Four of the *Discourse*. These exercises should encourage the reader to follow along with him in his discovery of these foundational principles: a process which contrasts with the construction of scientific theories based on these principles. The opening lines of the Second Meditation highlight this other format of presentation:

So serious are the doubts into which I have been thrown as a result of yesterday's meditation that... it feels as if I have fallen unexpectedly into a deep whirlpool which tumbles me around so that I can neither stand on the bottom nor swim up to the top. Nevertheless, I will make an effort and once more attempt the *same path* which I started on yesterday. [CSM II, 16]

The meditation format is one with which his readers will have been quite familiar: in religious works of the period they took the form of Devotions. Several scholars have pointed to the great popularity and influence of Ignatius Loyola's *Spiritual Devotions*, a work which Descartes knew well from his Jesuit school-days. One feature of this format which lends itself to philosophical purposes is that, unlike scholastic compendia of topics, in order to fully assimilate later stages, one must already have comprehended earlier stages, as well as the fact that they unfold in this particular sequence. It is as though one were traversing an entirely unknown terrain (another often used metaphor) and attempting to draw a map of one's course and environs. It is only possible to situate some new feature within the context of one's journey if all the previous features have been carefully marked out and if one's position relative to these features has been kept track of. To jump from point to point, i.e. from topic to topic in a textbook, is

to completely lose one's bearings. Thus the author solicits his readers to begin again, to make as many attempts as necessary, in order to follow his train of thought with complete confidence.

Husserl characterizes his own chosen format of exposition in similar terms:

[I will] attempt to show, to those willing to understand, one of the paths I have actually taken; as a path actually taken, it offers itself as one that can at any time be taken again. Indeed, it is a path which at every step allows just this self-evidence to be renewed and tested as apodictic, i.e. the self-evidence of a path capable of being taken repeatedly at will and capable of being followed further at will in repeatedly verifiable experiences and cognitions. [Crisis, 120-1]

Less than a year before the publication of the *Meditations*, in a Letter to Mersenne of Christmas 1640, Descartes has fully worked out the conceptual distinction between *ordo essendi* and *ordo cognoscendi* (or *rationarum*), though it is not stated explicitly anywhere in the text. In fact, it is in response to Mersenne's Second Objections that Descartes first publicly declares his twofold notion of demonstration, something that until then has only been implicit in his use of the building/path metaphors.

It should be noted that throughout the work the order I follow is not the order of the subject matter, but the order of the reasoning. This means that I do not attempt to say in a single place everything relevant to a given subject.... Instead, I reason in an orderly way from what is easier to what is harder, making what deductions I can, now on one subject, now on another. This is the right way, in my opinion, to find and explain the truth. [CSM III, 163]

On this vital issue, Martial Gueroult comments:

From the perspective of the *ratio essendi*, [the progress] arrives at the supreme reality from which all others are derived, the principle of deduction that, following the order of synthesis, climbs back down the ladder of beings beginning with their cause and with respect to their relations of mutual dependency. From the perspective of the *ratio cognoscendi*... the fundamental problem, the problem of the foundation of science as valid objective knowledge, seems completely resolved.¹⁹

¹⁹ Martial Gueroult, *op. cit.* vol. I, p. 203.

One of the most common complaints that Descartes will have against his detractors is that they extract some statement, e.g. about a thinking substance, from its place in the order of reasons and thus deprive it of its serially derived value. A specific statement has epistemic weight only insofar as it is an integral component of the unified argument formed by all six Meditations taken together. If any objector demands that a specific claim be considered on its own merits, irrespective of its ordered position, he has not understood the initial necessary condition, as prescribed in the First Meditation, to consider as false all those preconceived notions which make up a faulty and groundless edifice. Prompted by Mersenne's remarks in the Second Objections, Descartes attempts to forestall further misinterpretations by spelling this out.

As for the method of demonstration, this divides into two varieties:... Analysis shows the *true way* by means of which the thing in question was discovered methodically and as it were a priori, so that if the reader is willing *to follow it* and give sufficient attention to all points, he will make the thing his own and understand it just as perfectly as if he had discovered it for himself.... Synthesis, by contrast, employs a directly opposite method where the search is, as it were, a posteriori.... It demonstrates the conclusion clearly and employs a long series of definitions, postulates, axioms, theorems and problems, so that if anyone denies one of the conclusions it can be shown at once that it is contained in what has gone before. [CSM II. 110-1]

For the benefit of such readers who cannot follow the analytic method, he appends to the Second Replies a short treatise written in the synthetic method or, as he also phrases it, "arranged in geometrical fashion". This latter phrase harkens back to the geometrical arrangement of inferences in the *Rules*, where mathematical truths were held to be immune to doubt. Most famously, this dictum regarding the "user-friendly" aspect of the geometrical method was taken very seriously indeed by Spinoza in the *Ethics*.

Cottingham is surely correct when he expands on the peculiar meaning of a priori and a posteriori in this passage. Their usage does not seem to correspond with the modern, post-Leibnizian sense, where a priori truths are those known independently of experience; nor with the mediaeval Thomistic sense, where a priori reasoning proceeds from cause to effect. "What Descartes may mean when he says that analysis proceeds *as it were* a priori (*tanquam a priori*) is that it starts from what is epistemically prior, i.e. from what is prior in the order of discovery followed by the meditator." [*loc. cit.*]



note] The Cartesian use of the term *tanquam* to characterize the two types of method, analysis and synthesis, further underscores the as-if or as-it-were feature of methodical doubt, the pretence of the *malign genie*, and so forth. It is to E. M. Curley's credit, however, that he is not content to accept what Descartes says these terms are used for, as though they were stipulative definitions, but instead unpacks their textual elaboration. "The essential task of the analytic method is to bring [reflective] knowledge to consciousness, to turn the unclear and indistinct ideas of common sense into the clear and distinct ideas Descartes needs to make his argument demonstrative."²⁰

Long before the transcendental turning initiated by Kant's *Critique*, analysis and synthesis had meanings connected with the nature and function of cognition. They were taxonomic terms reserved for the type of ordering which took place in the demonstration of an argument, whether geometrical, astronomical or otherwise. Laplace, in *Exposition du Systeme du Monde* (1796), wanted to explain the peculiar dualistic format of Newton's *Principia* in much the same terms as Descartes described his own twofold format.

Newton had indeed *found* his results by means of the analytical method, but had *exhibited* them by means of synthesis. This, he said, had been done only out of respect for the geometry of the ancients, but on account of the advantage of geometrical synthesis, 'that it never makes one lose sight of its object, and that it illuminates the entire *path* that leads from the first axioms to their final consequences', instead of the way in which analysis quickly makes us forget the principal object, in order to occupy us with abstract combinations, and only returns us to it again at the end.²¹

If the *Meditations* is the most fully worked out presentation in the analytic format, the *Principles* is designed to satisfy those readers who demanded an exposition of his philosophy in the synthetic format. As well, of course, it is an opportunity for him to publish a more mature version of his theoretical physics first outlined in *The World*, composed between 1630-32, but held back after news of Galileo's

²⁰ E. M. Curley, "Analysis in the *Meditations*," in *Essays on Descartes' Meditations*, A. O. Rorty (Ed.) Univ. California Press, 1986, pp. 153-7.

²¹ Hans Blumenberg, *The Genesis of the Copernican World*, trans. by R. M. Wallace, M. I. T. Press, 1987, p. 100; author's emphasis.

condemnation. One marginal note at this juncture: insofar as he distinguishes the act of knowing and its modalities from that which is known and its attributes, he employs the paired terms *ordo cognoscendi* and *ordo essendi* for the former, and *ordo rationarum* and *ordo topicarum* for the latter. In all other respects, the dual terms for format of exposition are synonymous, as indeed are the path and building images respectively.

In Husserl's discussion of the results of the thought-experiment which posits the possibility of the non-existence of the physical world, he concludes that the being of consciousness would indeed be necessarily modified by such an annihilation, its very existence would not thus be negated. That this is a conceptual possibility implicates the contingent character of the world lying over against it and demonstrates the impossibility that there would not be a transcendental subject for whom such a world would appear. Consciousness in its purified character must be understood as a self-contained complex of being, a monadic complex of absolute being without windows. "Thus the sense commonly expressed in speaking of being is reversed. The being which is first for us is second in itself, i.e. it is what it is, only in relation to the first. But it is not as though there were a blind regularity such that the *ordo et connexio rerum* necessarily conformed to the *ordo et connexio idearum*. Reality... is *only* intentional, *only* an object of consciousness." [Ideas I. 112] The lack of correspondence between the order of reality and the order of cognitions approximates the same diremption which Descartes perceives between the two orders once the method of universal doubt has put the spatio-temporal world out of play.

In the Preface to the French edition of the *Principles* (1647), which is dedicated to Princess Elizabeth, Descartes feels obliged to console those who have never studied philosophy:

[There is] the following similarity with what happens when we travel: so long as we turn our back on the place we wish to get to, then the longer and faster we walk the further we get from our destination, so that even if we are subsequently set on the right road we cannot reach our goal as quickly as we would have done had we never walked in the wrong direction. [CSM. I. 183]

Shortly before the publication of the French edition, in a Letter to Princess Elizabeth of September 1646, he responds to her enquiry about his opinion of Machiavelli's *Prince*. He thinks that the Italian author's

greatest fault is that he does not distinguish between those who have achieved power by just means and those who have usurped it by unjust means. As such, the author's failure lies at the most fundamental level, that of the political principles which would discriminate between just and unjust methods. His analogy in this instance of political power is precisely the one which Demosthènes used: "If you are building a house on foundations insufficient to support high thick walls, the walls will have to be low and insubstantial; and similarly those who have gained power by crime are usually compelled to continue their course of crime and would be unable to remain in power if they took to virtue." [ibid. III. 292]

Before passing on to consider the definitive explication of the building metaphor in the Seventh Replies, where Descartes *identifies* his orientation with that of the architect, it is worth mentioning his use of the dual images in *The Search After Truth*. An unpublished manuscript found amongst his posthumous papers and first printed in 1701, it is generally ascribed to his final years, though there are some internal indications that it was composed just after the publication of the *Meditations*. It is in the form of a dialogue between Eudoxus, Descartes' spokesman; Epistemon, a learned scholar; and Polyander, a simple person of common sense. Eudoxus expresses surprise that not one person is to be found amongst the learned schoolmen who has the patience to follow the path Eudoxus has opened for them. "Instead they have nearly all acted like travellers who leave the main path to take a short-cut, only to find themselves lost amongst briars and precipices." [ibid. II. 401] Eudoxus is convinced that all can be explained to those who are willing to listen and follow, so that Polyander will most likely benefit from this, while Epistemon will merely counter every claim with its opposite.

Since this knowledge is not enough to satisfy him [Polyander], it must be faulty: I would compare it to a badly constructed *house*, whose foundations are not firm. I know of no better way to repair it than to knock it all down and *build* a new one in its place. For I do not wish to be one of those jobbing builders who devote themselves solely to refurbishing old buildings because they consider themselves incapable of undertaking the construction of new ones. [ibid. II. 407]

Descartes certainly considered himself capable not only of demolishing extant faulty edifices in the sciences, but also confident enough to build himself an entirely new structure. If all of the previous uses of the building image indicate only that such faulty edifices must be razed to the ground, it is not till

he has been provoked by Bourdin's arrogant mockery of both the meditator's pathfinding and the scientist's building, that Descartes will adopt the persona of an architect. Until this juncture, the builder's metaphorical brief has been to demolish, to clear the ground; in the Seventh Replies, the builder assumes positive duties. If the explicit message in the Preface to the Reader has been to meditate along with him, in the Seventh Replies there is an explicit statement of the builder's directions. Having attained a clear and distinct understanding of all previously secured propositions, one can also construct a coherent system in which these propositions are inter-connected according to valid rules of inference; or congruent with this imagery, according to correct rules of architecture.

Throughout my writings I have made it clear that my method imitates that of the architect. When an architect wants to build a house which is stable on ground where there is sandy topsoil over underlying rock, or clay or some other firm base, he begins by digging out a set of trenches from which he removes the sand, and anything resting on or mixed in with the sand, so that he can lay his foundations on firm soil. [ibid. II. 366]

In one of the most extended philosophical metaphors ever devised, Descartes reviews the arguments from the *Meditations* point by point, relating each to some feature of architectural practice. To begin with, methodical doubt encourages him to reject all that is doubtful, just as he throws out the sand, until he reaches something indubitable, i.e. that a thinking thing exists, which he takes as the bedrock upon which to build. His critic (Bourdin) is like a bricklayer, who having a grudge against the architect, complains about every aspect of the overall design. The architect explains that, after digging the trenches the topsoil must be removed because it cannot bear the weight of a large building. The sand is unstable because it will shift under a heavy weight or running water, and when this sort of subsidence occurs in mines, the miners attribute it to the action of goblins or demons. But because the bricklayer does not understand the overall design nor the theory of building which extends to *any structure*, he mocks each separate stage.

The bricklayer contends that no building could be built over an empty trench, i.e. a philosophy which rests only on the exploration of a new site would be a flimsy structure indeed. He further objects that the architect has thrown out perfectly good blocks of stone and wood with the sand, i.e. standard

"blocks" of proof or accepted definitions from the scholastic tradition. That the architect believes in goblins or demons which may undermine his efforts, an oblique reference to the *malign genie*, the demiurge of the third stage of doubt, whose overthrow reveals the absolute certainty of the cogito. And then, having reached bedrock, the critic objects that this too, the Archimedean point from which to shift the world, is also another stone and should be thrown away. And finally, standing on this bedrock, with the sand, rubble and demons cleared away, the architect begins to assemble his building using both new stones and some of the rejects; to which the bricklayer scolds that this isn't allowed, since all this material has been banished from the start by methodical doubt.

Of all Descartes' critics, Bourdin was the most wrong-headed and stubborn in his refusal to understand the very nature of this radical enterprise. Bourdin takes a gleeful pleasure in repeatedly pointing out that, having passed through the stages of doubt and having dismissed everything as uncertain, the meditator is left with only the cogito as his minimal achievement. In this utterly reduced realm, a winking point of light, one can claim nothing further. Again and again, Descartes reminds Bourdin that the function of methodical doubt is to consider various knowledge claims *as though* they were false, until such time as having reached a clear and distinct perception of something, this intuition will provide a criterion by which other claims, including those previously held, can be evaluated. This is the crux of Bourdin's persistent interruptions of Descartes' theoretical progress after the securing of the cogito; and by analogy, his tut-tuting every time the architect attempts to place another stone at the building's foundations.

Descartes concludes this first response to his own parody of Bourdin's criticisms by making two crucial points. One is that Bourdin has attacked his method and materials *as if* it were not possible to construct such a building, whereas it is a *matter of fact* that the building has already been erected. Bourdin is so blinkered by his own prejudices that he thinks it is impossible to do something which has already been done. Surely the productive criticisms which Descartes encourages should be directed towards flaws in the building itself. The second point is that this is not just any edifice, but "a solid chapel, destined to last for many years to the glory of God." This is an overt reference to the link in the chain of reasons whereby it is divine perfection and infinitude which ensures the veracity of clear and distinct seeing.

He proceeds to respond to each of Bourdin's exiguous sarcasms by expanding on specific issues already included in the summary of his architectural method. It will serve no good purpose to unpack all of the subsidiary objections, many of which are expressed with such vehemence that one has the impression that, having knocked down his opponent, Descartes is determined to finish him once and for all. However, it is worth underlining several salient points made along the way. It is in this context that he remarks that scepticism is alive and well, and is the first refuge of those who think that they are more gifted than the rest. [CSM. II. 374] It is also the only context, aside from his private letters, where he makes the explicit declaration that he has become "the first philosopher ever to overthrow the doubt of the sceptics." [ibid. II. 376]

He parodies Bourdin's mockery of his "long odyssey", when the meditator wandered around, exhausted himself, and got stuck on rugged slopes and dense thickets. But this is the very imagery that Descartes himself reverts to near the end of his rebuttal: "on my *journey*, where I led the mind from knowledge of its own existence to knowledge of the existence of God and to the distinction between mind and body." [ibid. II. 375] Couched in this elaborate building analogy are several references to the path and the journey undertaken -- this is not a case of mixed metaphors. In a simplistic fashion one could say that, viewed from the *outside*, as an accomplished fact, the totality of the results resemble a building; but viewed from the *inside*, from the viewpoint of the meditator in the ongoing act of philosophizing, the way ahead and behind looks like the itinerary of a journey.

Before considering this final synoptic metaphor, it is relevant to point out the long lasting effect that the architect of the Seventh Replies had on one of his other objectors. Pierre Gassendi, the author of the Fifth Objections, was quite probably influenced by reading the final version of the published *Meditations*, which contained all the objections and replies. Given his tempering of the extreme skepticism in his *Exercices* (1624), one finds a compromise between excessive doubt and an early version of empiricism in the *Syntagma* (1658). In the section devoted to logic, Gassendi compares the craft of building to several other disciplines: grammar, medicine and the natural sciences.

A physicist teaching natural science sets before our eyes the outward configuration of nature, or the machine of the world, the heavens, the earth, the things that are found in them, just as if they were the greater and lesser parts of an enormous building, and by resolving them into their smallest elements, he assumes these as his primary particles (*principia*) from which the universe is constructed.²²

Descartes' lifelong journey will indeed take him to a new world, that is, a new model of the world of scientific knowledge and a new foundation for the systematic acquisition of such knowledge. "It will be enough if I open the way which will enable you to discover them [physical laws] yourselves, when you take the trouble to look for them." [ibid I. 97] The trouble which must be taken is to learn to philosophize in this novel manner, to think through these steps in the order of reasons. "I decided to leave our world wholly for them [the learned] to argue about, and to speak solely of what would happen in a new world." [ibid I. 132] The learned in this world are devoted to their ancient edifices and only argue about minor changes, leaving a faulty structure intact. This new world whose physical laws are described in the *Optics*, *Geometry*, *Principles*, etc. is reached by means of an unprecedented voyage of discovery. This discovery is as revolutionary as Copernicus' cosmology and Columbus' exploration, standards against which later historians will compare the Cartesian overthrow, and its narrative is recounted in the *Meditations*.

Bourdin appropriates Descartes' metaphor of a journey to a new world but only in order to repeatedly mock its results. He is sarcastic and sometimes outright contemptuous of the meditator as a reliable guide, someone who has opened the way to a marvellous new domain which others were too feeble and inept to even have noticed. Bourdin feels shipwrecked on "these shores of renunciation which are so full of terror and darkness". [ibid. II. 336] Although his remarks are usually parodic, he correctly equates this philosophical journey with the appropriate methodology for uncovering the ground of certainty when he groups his criticisms under the rubric: "attempt to find a way into the method". In the very same section where Descartes insists that throughout his writings his method has imitated that of the architect, he also refers to the *process* by which his method has been articulated as a *journey*. [ibid. II. 375] In terms of the former image, Bourdin is a stubborn bricklayer, in terms of the latter, he is a foolish

²² Pierre Gassendi. *The Selected Works*. Ed. & trans. by Craig Brush. N.Y.: Johnson Reprint, 1972. p.374.

and inept sailor. As discussed above, there is no internal conflict between these two images: from the point of view of the philosopher, the unfolding of the order of reasons is a linear progression; from a third-person point of view, the totality of the results achieved by these means resembles a stable building.

A philosophical enterprise conceived as a long arduous journey is a grand trope which has a long history in the principal works since the early 17th century. It is possible that it could not even be thought of as such before the 16th century's great voyages of exploration; but in any case, it will only be feasible in this research to trace some of its more prominent forward stations. Although John Locke famously described his own self-appointed task as "an Under-Labourer in clearing Ground a little, and removing some of the Rubbish, that lies in the way to Knowledge", his ambition had grown by the end of Book I. "In the future part of this Discourse, designing to raise an Edifice uniform, and consistent with it self... I hope to erect it on such a Basis, that I shall not need to shore it up with props and buttresses, leaning on borrowed or begged foundations. Or at least, if mine prove a Castle in the Air, I will endeavour it shall be all of a piece and hang together."²³

If Locke relies on the metaphor of likening the results of philosophical construction to a building, Kant falls back on the metaphor of the philosophical *process* as a journey. After he presents the Transcendental Deduction and the Analytic of Principles, he employs this image in order to introduce the ground of the distinction between phenomena and noumena.

We have now not merely explored the territory of pure understanding, and carefully surveyed every part of it, but have also measured its extent, and assigned to everything its rightful place. This domain is an island, enclosed by nature itself within unalterable limits. It is the land of truth -- enchanting name! -- surrounded by a wide and stormy ocean, the native home of illusion, where many a fog bank and many a swiftly melting iceberg give the deceptive appearance of farther shores, deluding the adventurous seafarer ever anew with empty hopes and engaging him in enterprises which he can never abandon and yet is unable to carry to completion.²⁴

²³ John Locke. *An Essay Concerning Human Understanding*. Nidditch (ed.) Oxford, 1975. pp. 10, 102.

²⁴ Kant. *Critique of Pure Reason*. trans. by N. Kemp-Smith. A236 (B295).

There is a colligation of imagery in this grand metaphor which it is difficult to imagine is *entirely* a Kantian figure of speech, since it so closely parallels Descartes' own usage. This explorer also compares the philosophical quest to a long voyage, the enunciation of its progress to the charting of a new-found land, a new world surrounded by the mists of illusion, and mirage-like features which may seduce or tempt those who follow away from the proper path.

Hegel in his *Lectures on the History of Philosophy* is quite explicit in placing this metaphor at the forefront of a 19th century understanding of Descartes' achievement. "Actually we now first come to the philosophy of the modern world and we begin this with Descartes. With him we truly enter upon an independent philosophy, which knows that it emerges independently out of reason.... Here, we may say, we are at home, and like the mariner after a long voyage over the tempestuous sea, we can finally call out, 'Land!'."²⁵

As early as 1906/07, with the assimilation of the skeptical impetus and the inauguration of the reduction, Husserl begins to talk about the overall phenomenological enterprise as a voyage of discovery. It's hard to imagine how these several factors could have accidentally generated this grand trope, as though it were no more than a clever figure of speech, a curious metaphor used by writer rarely given to any sort of literary imagery. It is in these lectures, after all, that one has the first glimpse of the Cartesian way into phenomenology. Before this date there is no discussion of Descartes, no mention of methodical doubt, the transcendental domain of consciousness, or the dual orders of cognitions and things. The lectures *thematize* the train of thought which traverses the various levels of the reduction as the philosopher's "quite personal affair", and one which must be taken up by anyone who seeks to philosophize in this radically new manner. With regard to the apparent world considered purely as a phenomenon, deprived of its tacit positing of actuality, Husserl remarks:

And so we have dropped anchor on the shore of phenomenology, the existence of the objects of which is assured, as the objects of a scientific investigation should be.... But we must take new steps, enter onto new considerations, so that we may gain a firm foothold in the new land and not

²⁵ Hegel, *Lectures on the History of Philosophy*, trans. by E. S. Haldane & F. H. Simpson, New York, 1955, vol. III, p. 217.

finally run aground on its shore. For this shore has its rocks and over it lie clouds of obscurity which threaten us with stormy gales of scepticism. [IP. 35]

If these lectures have served to demarcate the phenomenological domain as a new-found land, it is not until the *Ideas* that Husserl styles himself an explorer. At the close of Part Three, Chapter Three, he reminds the reader that throughout the previous analyses, phenomenology should always be understood as *beginning* science. That only future researches will demonstrate whether or not these results are definitive -- an oblique reference to the author's peculiar process of composition, i.e. constantly backward glancing reinterpretations which are then assimilated into an even richer forward movement. But one consideration should provide some reassurance: that through this movement, one has always striven to faithfully describe exactly what is seen, as it is seen.

Our procedure is that of an explorer journeying through an unknown part of the world and carefully describing what is presented along his unbeaten paths, which will not always be the shortest. Such an explorer can rightfully be filled with the sure confidence that he gives utterance to what must be said... even though new explorations will require new descriptions with manifold improvements. [Ideas I. 235]

By the time of the lectures on *Erste Philosophie* (1923/24), Husserl will have become disenchanted with the Cartesian way, though the other ways will remain somewhat inchoate until their definitive formulation in the *Crisis*. If until this date his point of departure had been located in Cartesian methodical doubt, it is a departure from a point in the ongoing journey which opens up the possibility of other routes. This is why these lectures are often referred to as the history of a *shipwreck*: "It is the path of an experimenting adventurer in thought whose successes are constantly thrown into question in the reflections which accompany the lectures and whose goal is not fixed from the start so that it actually leads elsewhere than initially foreseen."²⁶ The paradoxical result of his attempt to take into account all of the advances in his thought since the *Ideas* is that the Cartesian way, with its irreducible foundation in primary principles, is simply not workable. In no other work does he so expose himself to the force of the absolute, to such an extent that the forward movement of his thought is pushed to a virtual limit -- "a

²⁶ Ludwig Landgrebe. "Husserl's Departure from Cartesianism", in *The Phenomenology of Husserl*. R. O. Elveton (Ed.) Chicago: Quadrangle, 1970. pp. 259-61.

thought which does not aim at a will to mastery through a system, but one which advances toward the affair with restless abandon."

It is in the context of his most severe criticism of Descartes, that he reached the gate of transcendence but turned away with an ego empty of content, that he again invokes the notion of a journey, but here a journey thwarted, shifted unwittingly off course. "The proper sense of the discovery Descartes could not seize for himself. Behind the apparent triviality of his well-known phrase *ego cogito, ego sum*, there open up in fact depths all too dark and deep. It was with Descartes like Columbus, who discovered the new continent, but knew nothing of it, merely believing to have discovered a new sea-route to India." [HUS VII. 63] There is a certain irony to this passage, since irrespective of whether this new land is America or India (or Erewhon), one's mapping of the territory itself would be deemed accurate and helpful for entirely autonomous reasons. Descartes chides Mersenne in the Sixth Objections for appealing to external authority in countering the assertion that there is a basic intuitable distinction between the essence of a thinking thing and an extended thing. "One witness who has sailed to America and say that he has seen the antipodes deserves more credence than a thousand others who deny their existence merely because they have no knowledge of them." [CSM II. 286]

In the *Crisis*, Husserl draws a curious analogy between the transcendental dimension disclosed by Kant's *Critique* and Helmholtz' fiction of a world of 'plane'-beings who have no experience of depth (this may be more familiar to readers from Abbott's *Flatland*). In this imaginary world, all practical, mundane activities and all reflection on these activities which supports the empirical sciences are carried out in two dimensions. However, the true state of affairs is that there is a third dimension of depth from which the 'picture' of the world-plane is projected. Only if one has an understanding of this "infinitely richer dimension" is one able to grasp the necessary conditions which allow for regularities and connections to be discerned within the plane. Husserl's analysis of Galileo's remodelling of the natural order showed how it was plausible that further developments of the empirical sciences were seen as unqualified successes. But between the patent life of the plane and the latent life of depth there is a great distance, a divide separates "unclearly arising needs [and] goal-determined plans."

[Here] the explorer is met by logical ghosts emerging out of the dark, formed in the old familiar and effective conceptual patterns, as paradoxical antinomies, logical absurdities. Thus nowhere is the temptation so great to slide into logical aporetics and disputation, priding oneself on one's scientific discipline, while the actual substratum of the work, the phenomena themselves, is forever lost from view.... [I will show] one of the paths I have actually taken; as a path actually taken, it offers itself as one that can at any time be taken again. [Crisis, 120]

This is an unusual conjunction of rhetorical images: an explorer who encounters logical ghosts formed from prejudices, who might derive a false confidence from his scientific method, but who reaffirms the necessity for a proper path to be followed. It is the same conjunction of images which Descartes employs, through his mouth-piece Eudoxus, in *The Search After Truth* (an unfinished dialogue probably composed about the same time as the *Meditations*). As we have seen earlier, this dialogue carries forward from the *Rules* and the *Discourse* the same dual analogy of science as a building and philosophy as a path, a preview of the more explicit formats, order of essences and order of reasons. Polyander, a man of common sense, has shown uncommon willingness to follow Eudoxus' lead, while Epistemon, a learned scholar, repeatedly halts any progress with his cautions and amendments. He thinks that it is dangerous to proceed too far along Eudoxus' line of thinking, for such general doubts would lead straight to Socratic ignorance or skeptical uncertainty. Eudoxus attempts to reassure him on this score:

I confess that it would be dangerous for someone who does not know a ford to venture across it without a *guide*, and many have lost their lives in doing so. But you have nothing to fear if you follow me. Indeed, just such fears have prevented most men of letters from acquiring a body of knowledge which was firm and certain enough to deserve the name of '*science*'.... I would advise you that these doubts, which alarmed you at the start, are like *phantoms* and empty images which appear at night in the uncertain glimmer of a weak light. [CSM II, 408, emphasis added]

For Husserl to claim that all of the many streams of modern philosophy have their source in the radical insights of Descartes' *Meditations* is far more than a seal of approval for his own phenomenological enterprise. To declare that subjectivity is the proper domain upon which to found a criterion of certainty, to make the philosopher's own commitment to this unique activity a desideratum for its engagement, and to abandon all previous conceptions as unsuitable for such an endeavour is a summons to an arduous though rewarding adventure. "There are some ideas which make it impossible for

us to return to a time prior to their existence, even and especially if we moved beyond them, and subjectivity is one of them.... Subjectivity was not waiting for philosophers as an unknown America waited for its explorers in the ocean's mist. They constructed it, created it in more than one way."²⁷

²⁷ M. Merleau-Ponty. "Everywhere and Nowhere", in *Signs*. trans. by R. C. Cleary. N.U.P., 1964, p. 152.

CHAPTER 4
SIMPLE AND COMPLEX NATURES
AND PART-WHOLE THEORY

In the course of our researches into the parallel structural developments of Descartes' and Husserl's philosophical enterprises, the reader should be in a position to make this basic observation. That as well as explicit convergences in the backgrounds to which they react, i.e. skepticism and psychologism, and the radical direction which their overturning takes, some convergent conceptual schemas are dispersed throughout their projects. And this dispersal is a consequence of their having undertaken similar analyses at the ontological level. As such, these analyses are genetically prior to their theories of knowledge formation, clear and distinct seeing, and the function of methodical suspension (*epoche*).

They are prior in that they occupy -- and would always have to occupy -- the same *first place* in the taxonomy of any *mathesis universalis*. It is not merely the case that any explicit working-out of an ontology would have to occur at a primordial stage, but that Descartes' and Husserl's ontologies are also functionally equivalent, i.e. in terms of their place in the theoretical frameworks into which they are fitted. Profound implications of these ontologies re-emerge at similar points in later topical analyses, for example, the function of judgement in language, the nature of mind-body interconnection, and so forth.

For Descartes, the only explicit working-out of what could be called an ontology, as an examination of what sorts of things there are, occurs in Rule XII of the *Rules*, a brief supplement in Rule XIII, and its expansion in Chapter 2, Part 4, of Arnauld and Nicole's *Port-Royal Logic*¹ - the theory of simple and complex natures. For Husserl, the first comprehensive statement² of the theory of parts and wholes occurs in Investigation III of the *Logical Investigations* [LI. 435-89], though it is taken up again in *Ideas: First Book* [28-32], and *Experience and Judgement* [EJ. 103-48]. Husserl himself was well aware that part-whole theory was usually overlooked or dismissed in favour of the other Investigations. William

¹ For the place of this lacuna in the text, see CSM. I. 77-8.

² This is not the context for a discussion of an earlier version, the theory of aggregates, for which see, David Bell, *Husserl*. Routledge, 1990, pp. 62-71; and Dallas Willard, HSW. 86-91.

Kneale, co-author of the magisterial *Development of Logic* (Oxford, 1962), on a visit to Freiburg in 1928, was informed by Husserl that Investigation III was the *best* starting point for the study of his writings in phenomenology.³

The theme of this present research is the intrinsic convergence, i.e. the structural parallel at this genetically prior level, of these two ontological schemas. To begin with, we can eliminate what this theoretical connection is *not* about. It is not an attempt to establish that Descartes' concept of simple and complex natures had an *influence* on Husserl in his formulation of part-whole theory. Nor is it an attempt to uncover a startling *precursor* three centuries earlier, in the way that some might say that the phenomenological concept of intentionality has its origin in the late scholastic/mediaeval notion of "intentional inexistence" -- an interesting historical footnote, but no more.

Rather, our thesis is that the theory of simple-complex natures stands in *relation* to the maturation of Descartes' entire philosophical project in approximately the same way that part-whole theory stands to Husserl's evolving phenomenological enterprise. That each is a sketch of a formal ontology of the world which is an essential preliminary grounding for subsequent epistemological enquiries made about that world. In addition, that just as the lawful interrelation of simple and complex will inform a pivotal stage in the certain foundation of the cogito in the natural world for Descartes, so also part-whole inter-dependence will be reintroduced by Husserl to explicate the relation between soul and body after the reduction has revealed a world of essences.

Pioneering historical research by Elmar Holenstein⁴ has uncovered the profound influence of Husserl's part-whole theory on related contemporary disciplines. There is no reference, for instance, in Spiegelberg's authoritative *Phenomenological Movement* (3rd edition, 1971) to the tremendous impact that this had on the inception of structural linguistics. Besides de Saussure's *Cours de Linguistique Generale* (1916), it is Roman Jakobson's early work in the 1920s which inaugurates this revolutionary model of linguistic analysis. The first translation of the *Logical Investigations* was into Russian about 1909, followed two years later by a translation of the essay "Philosophy as Rigorous Science". When

³ H. Spiegelberg. "From Husserl to Heidegger". *J. Brit. Soc. Phen.* (1971) p. 78; this is from Boyce Gibson's Freiburg Journal for those years.

⁴ E. Holenstein. "Jakobson and Husserl". *Human Context.* (1975). pp. 61-83.

Jakobson began his university studies under Gustav Spet in Moscow in 1914/15. Husserl's work was not just known about, it was the hottest new subject. The next year, one of the seminars was devoted to Kurt Koffka's *The Analysis of Ideas and Their Laws* (1912). Koffka was one of Carl Stumpf's most promising pupils and one of the founders, with Kohler and Wertheimer, of Gestalt Psychology, itself grounded on a phenomenological interpretation of psychical events, via part-whole theory.⁵ In 1936, Jakobson referred to the *Logical Investigations* as a work "whose breadth of importance for language theory can never be sufficiently emphasized", and as late as 1963, he singles out its Second Part as "still one of the most inspiring contributions to the phenomenology of language."⁶

Jakobson's teachers also recommended that he study the works of Anton Marty who, like Husserl and Stumpf, had studied under Franz Brentano. Marty's *Foundation of Universal Grammar* (1908) and Stumpf's *The Sounds of Language* (1926) were crucial empirical researches within the framework of what later became structural linguistics. In Prague in the 1920s, Jakobson had informative encounters with two other Husserl students: Alexander Koyre, who later did such great work in the history of scientific theory⁷, and Ludwig Landgrebe, Husserl's personal assistant from 1923-30. Amongst the founding members of the Prague Linguistic Circle in the 1930s were several academics who had been directly or indirectly influenced by Husserl's logical analysis of the structures of language.

In fact, in November 1935, Husserl gave a lecture to the Prague Circle on the intersubjective constitution of language.⁸ Jakobson had already presented him with his own paper, "Folklore as a Special Form of Creation", and Holenstein speculates that this may have stimulated Husserl's own thoughts, since Jakobson's paper bears on the same topics as Husserl's later "The Origin of Geometry", composed in 1936. This was not the only point of contact with the new anthropology's study of folklore and primitive mentality. In a letter of March 1935, Husserl credited the French anthropologist Lucien Levy-Bruhl with

⁵ See, Mitchell Ash. *The Emergence of Gestalt Psychology*. Ph.D. Dissert. Harvard Univ. 1982. Chap. 2; Barry Smith, Ed. *Foundations of Gestalt Theory*. Munich: Philosophia, 1988. pp. 12-30.

⁶ Holenstein. *op. cit.* p.62.

⁷ Koyre's work in *Etudes Galilennes*, Paris: Hermann, 1939 shows many parallels with Husserl's discussion of the significance of Galileo's mathematical model of the natural sciences in the *Crisis*, pp. 23-59.

⁸ Neither Husserl's own text nor any written record of this lecture have survived: Holenstein. *op. cit.* p. 80, note 8.

having anticipated his own conception of the horizons of the life-world⁹ and thus shown the way for a genuine science of social and cultural forms.

During the period between *La Fonction Mentale dans les Societes Inferieures* (1910) and *La Mentalite Primitive* (1922), Levy-Bruhl had worked out his prelogical conceptual strategies of "participation" and "pars pro toto"; whereby the primitive mind does not cognize the part as symbolically standing for the whole, but identifies or equates, in some fashion, the present part for an absent whole. It is worth noting that at this time, the Gestalt psychologist Max Wertheimer, a close associate of Koffka and Kohler, reprinted in a general publication (Erlangen, 1925) an earlier paper on "Numbers and Numerical Concepts in Primitive Peoples".¹⁰ Marcel Mauss, one of the other early pioneers in "phenomenological" anthropology, reviewed Husserl's and Max Scheler's works in 1925, and credited Husserl, in an article on "Collective Categories" in 1934, with an exemplary grasp of the psychology of intelligence.¹¹ By way of a postscript, one should not forget that Claude Levi-Strauss explicitly cites structural linguistics as the "scientific model" which genuine anthropology should emulate, and dedicated *The Savage Mind* (1962) to the memory of his close friend and colleague, Maurice Merleau-Ponty. However, it would take this research too far afield (if it has not already done so) to explore the areas of convergence and complementarity between Husserl's part-whole theory, on the one hand, and structural linguistics and anthropology, on the other.

One should pause here, in any case, to consider the extraordinary influence which Investigation III exerted on the theoretical foundations of Gestalt Psychology, and to some extent, the converse also. Much as Brentano's notion of the intentionality of consciousness was to provide Husserl with a powerful new model, so also C. Ehrenfels' "On Gestalt Qualities" (1890), via part-whole theory, was to initiate the original notion of *gestalt*. In this paper, he postulated that there were mental states and processes which

⁹ H. Spiegelberg. *The Phenomenological Movement*. 3rd ed. The Hague, 1971. pp. 161-2; the letter has recently been published in French, *Gradhiva*. vol. 4 (1988). pp. 63-72; on the discovery and transmission of this letter, see M. Merleau-Ponty. *Texts and Dialogues*. Ed. by H. J. Silverman & James Barry. New Jersey & London: Humanities Press, 1992. pp. 156-8.

¹⁰ English trans. in W. D. Ellis. *A Source Book in Gestalt Psychology*. Routledge. Kegan Paul, 1938, reprint, 1950. pp. 265-73.

¹¹ Marcel Mauss. *Oeuvres*. Les Editions de Minuit, 1969. Tome I, pp. 157-9; Tome II, pp. 148-50; cf. also, Spiegelberg. *Phenomenological Movement*. p. 402.

exhibited two distinct features: that the conscious experience of some wholes' parts was greater than the mere summation of those parts when experienced discretely; and that this specific feature remains unchanged when the complex of parts upon which it is built undergoes certain determinate kinds of displacement. Ehrenfels' illustration of both these features of gestalts was derived from the perception of tones in a musical melody; an analysis which bears a striking resemblance to Husserl's research on the consciousness of internal time, as early as 1893. [*Time*. 141-55]¹²

Wolfgang Kohler's *Physical Gestalts* (1920) and Kurt Koffka's *Principles of Gestalt Psychology* (1925) further developed central theoretical insights of this research and that of their former teacher, Carl Stumpf. These insights included three basic concepts: the first, the law of *proximity*, states that in the total affective field, all else being equal, those components which are closest to each other tend to form groups, and lines which enclose a surface tend to be perceived as a unit. The concept of *pregnance* means that stimuli are organized by the perceiver into shapes and patterns which tend to maximize simplicity, e.g. seeing slightly irregular objects as circles or squares, etc. According to the concept of *prominence* every object brought forward, or made to stand out, as the result of the advertence of attention is perceived as a figure against a ground. This last notion is comparable to the phenomenological postulate that objects are always given to consciousness within a fringe of less-clear objects and against a horizon of as yet unattended possible objects.

Kurt Lewin, first in *The Concept of Genesis* (1922) and then in *Principles of Topological Psychology* (1936) was to extrapolate these insights from the individual psychical domain to the general structures of interpersonal dynamics in the social world. Across the collateral development of these two movements, with such an abundance of reciprocal influences, no other thinker contributed as much to both pure phenomenology and to Gestalt Psychology as Aron Gurwitsch. Though Russian by birth, he studied in Germany in the 1920s, and lived and worked in Paris in the 1930s, along with many other of Husserl's students. One of his earliest works is still regarded as unsurpassed in the comparison of these two disciplines, "Phenomenology of Thematics and of the Pure Ego: Studies of the Relation between

¹² Compare Descartes' analysis of the perception and expectation of proportionality in the unfolding of a sequence of musical tones in the "Compendium Musicae" of 1618. AT. X. 94.

Gestalt Theory and Phenomenology" (1929).¹³ Gurwitsch is quite explicit in stating that these investigations presuppose the validity of the general phenomenological insights of Husserl's *Ideas: First Book* (1913), though descriptive psychological consequences will have to explore beyond purely theoretical conclusions. Gurwitsch actually cites the whole of Descartes' project as an example of an abstract conceptual schema which can be made thematic for a proper phenomenological analysis; and that is just what we shall do here.

To recollect the reticulating strands of linguistics, anthropology, and Gestalt Psychology, let us return to one of our original points of departure -- Descartes' simple and complex natures. If Husserl's formalization and conceptual analysis of part-whole relations was a ground-breaking theoretical advance, Descartes' rough sketch of these "primitive terms" was very much rooted (at least at this early period before 1627) in the accepted scholastic framework of the late 16th, early 17th Centuries. Recent studies by Jean-Luc Marion, on two fronts, have well documented both the source and the character of Descartes' initial concept of substance in Aristotle's *Metaphysics*¹⁴ and the essential continuity of Rule XII's foundation with its later adumbration in the *Meditations* and the *Principles*.¹⁵ However, neither of these valuable studies devotes any attention to the *internal relations* established by the eight theorems, especially to these crucial notions: necessary and contingent connection, the origination and construction of these "natures", and their role in the formation of judgements and numerical concepts.

Dennis Sepper's study¹⁶ of Descartes' intellectual interests before the composition of the *Rules* has illuminated some aspects of this work as the resolution of specific problems in the field of cognitive functions, particularly imagination and memory. From his early correspondence, it is apparent that he devoted some study to works on the art of memory, those of Raymond Lull, Agrippa, and Schenkel, amongst others.¹⁷ In the demonstration of a geometrical postulate, for example, one first grasps the truth

¹³ Aron Gurwitsch. *Studies in Phenomenology and Psychology*. various trans. Northwestern Univ. Press, 1966. pp. 175-286.

¹⁴ Jean-Luc Marion. *Sur L'Ontologie Grise de Descartes*. Paris: J. Vrin, 1975. pp. 131-48.

¹⁵ Jean-Luc Marion. "Cartesian Metaphysics and the Role of the Simple Natures", in *Cambridge Companion to Descartes*. John Cottingham, Ed. Cambridge, 1992. pp. 115-39.

¹⁶ Dennis Sepper. "Ingenium, Memory Art [etc.]", in *Essays on the Philosophy and Science of Rene Descartes*. Stephen Voss, Ed. Oxford, 1993. pp. 142-61.

¹⁷ Lull, AT. X. 157, 165; Agrippa, AT. X. 165, 168; Schenkel, AT. X. 230. See also, Frances Yates. *The Art of Memory*. Univ. Chicago Press, 1966. pp. 373-5.

of one premise in an adequate intuition, and then proceeds to the next premise (or link in a chain of reasons), which is also secured in this manner, and so forth. Although the relational necessity between these premises may also be intuited, the mind's holding-in-grasp of the truths of these premises is not itself an act of adequate cognition. The condition of having established an inference (or chain of reasons) in a demonstration depends on another cognitive faculty, memory, which is open to failure in ways in which the intellect is not.

The elaboration of corporeal images in imagination --what later psychologists will refer to as the process of visualization in mathematical construction -- assists in the extraction of that thing, through the process of *variation* of instances, towards which intuition is brought to bear. Such corporeal images may then also assist in citing or place-holding in memory all those premises which have been secured. But such images only *assist*, they do not alone secure the accurate transition from point to point in memory, since only one point at a time can be called up from memory and made the 'content' of an intuition. Another way to state this problem is: having grasped the truth of x, y, and z, and having understood their necessary connection, in the attending to z as the conclusion intuited now, why is it this x that is called up as having been secured, and not some other, say, w? There is nothing intrinsic to z qua intuited truth which points it backward, so to speak, to x merely as an intuited truth which bears a necessary connection to *something*.

In the *Private Thoughts* of 1618/19, the young Descartes already had an insight into a novel way out of this dilemma, in stark contrast to the prevalent doctrine of mnemonic technique.

On reading through Schenkel's profitable trifles... I readily thought that everything I have discovered had been embraced by imagination. It occurs by the leading back [*reductio*] of things to causes; when all those things are finally led back to a single one, there will be no need of memory from any science. For whoever understands causes will easily form anew in the brain the altogether vanished phantasms by the impression of the cause. This is the true art of memory and it is plain contrary to the art of that sorry fellow. Not because his art lacks effect, but because it requires the whole space [*chartam*] that ought to be occupied by better things and consists in an order that is not right; the [right] order is that the images be formed from one another as interdependent. He omits this... which is the key to the whole mystery. [AT. X. 230]

The realization of the problem and the initial glimmer of an answer in 1618/19 was to reach fuller theoretical clarification a decade later. In Rule III of the *Rules*, Descartes claims that there are only two actions (or operations) of the intellect whereby one is able to arrive at certain knowledge: intuition and deduction. Intuition is "the indubitable conception of a clear and attentive mind which proceeds solely from the light of reason." Deduction is "the inferring from true and known principles through a continuous and uninterrupted movement of thought in which each individual proposition is clearly intuited". And here one encounters the problem of how discrete cognitions of intuited truths are sequenced or chained as necessarily following from each other. "Immediate self-evidence is not required for deduction, as it is for intuition: deduction in a sense gets its certainty from memory." [CSM I. 14-15] It is this "in a sense" which requires further elucidation and returns our attention to "the key to the whole mystery".

The main secret of my method [is] in order to distinguish the simplest things from those that are complicated and to set them out in an orderly manner, we should attend to what is most simple in each series of things in which we have directly deduced some truths from others, and should observe how all the rest are more, or less, or equally removed from the simplest. [CSM I. 21]

He goes on to say that this is the most useful rule in the whole treatise for it shows that everything can be arranged serially in various groups, insofar as some things can be known *on the basis* of others; i.e. that some things are *founded* on others in a certain and regular manner. It may seem paradoxical that he qualifies this by saying that such an arrangement is not made by reference to an ontological genus, in the Aristotelian categories of substance and accident. But this is not so, since his main taxonomy of "things insofar as they are known" will be articulated entirely in terms of the ontological structures disclosed through necessary regularities in consciousness. Given this proviso, to consider things in the order which corresponds to our knowledge of them, it is entirely in keeping with the foregoing examination that Sepper remarks, apropos the algebraic schema in Rules XV - XVIII: "what this amounts to is a formalization of the ontology and epistemology of resemblances to which Descartes held in his private cogitations of 1619-21."¹⁸

¹⁸ Sepper. *op. cit.* p. 151.

We are on the verge of Descartes' exposition of simple and complex natures, but how far are we from an understanding of the motives and rationale which led Husserl to part-whole theory? Is it possible that the proposed structural parallel in their ontological schemas is at least partly the result of a congruence in their approach to this problematic?

One of Husserl's main concerns before the *Logical Investigations*, aside from his confrontation with empirical psychology of logic, had been an attempt to provide a coherent non-psychological account of number and the arithmetical operations. Having initially trained in mathematics in the 1870s, Husserl must have been impressed by the lack of general rational procedures by which mathematicians went about their work. "At critical points [it] depended upon the blind (even when accurate) instincts and tact of individual mathematicians -- who often held quite divergent theories about the techniques by which they nevertheless obtained identical results."¹⁹ Employing Brentano's notion of intentionality in the phenomenal realm and the novel concept of aggregate, Husserl began his research into the conditions and status of objective knowledge for number and numerical operations.

In the First Part of *The Philosophy of Arithmetic* (1891), he contends that one can have a concrete intuition of 'objects' which, as mere contents of presentations, can be given immediately and all at the same time, up to about twelve 'objects'.²⁰ Where the content of an intuition is no more than the 'object', the content of a concept is a second-order content whose 'object' is the original intuition. By disregarding (or abstracting from) specific *parts* of a concrete intuition, one can have direct cognition of an abstract *moment* (dependent part) which cannot comprise the entire content of an intuition in isolation. It is by means of abstract and general concepts that the identity, or rather identifiability, of those things in some grouping are understood to be the same sort of thing; and thus comprise just *this* group and not some other.

Problems begin to occur when the numbers at issue are greater than twelve, for there is no feasible way in which more than twelve 'objects' could be given in a concrete intuition. So-called

¹⁹ Dallas Willard. "Wholes, Parts and the Objectivity of Knowledge"; in *Parts and Moments*. Barry Smith, Ed. Munich: Philosophia, 1982. pp. 382 ff.; see also, M. Kline. *Mathematical Thought*. Oxford, 1972. pp.1023-39.

²⁰ Jean Piaget and others would later propose a much lower limit of about seven items.

"inauthentic" concepts of larger numbers must somehow be ultimately founded on intuitions, but through another mode of cognition: and as concepts, their content is different from the merely concrete. Husserl's answer is that, "in the intuition of a sensible group there must be immediately comprehensible signs in which this group character can be recognized.... The name and concept of a group can then be immediately associated with these signs"²¹ which Husserl also refers to as "figural moments" and "Gestalt qualities". One should bear in mind that this work and other collateral studies were undertaken at the same time as Ehrenfel's work.²²

It is these *signs* which are immediately apprehended, and as *figural moments* they are complexes of relational features held by members of the group, not given *tout court* by each and every member qua member. The *symbolic* character of this gestalt is superadded, just like any other gestalt, when this group comes together in just this way, and is never reducible to the mere summation of all the individual members. This symbolic aspect allows for the conceptual manipulation of very large numbers without ever "losing track" of their ultimate foundation in concrete intuitions.

The system of signs which permit the solution of problems and equations with unknowns are the numerals, which have three essential properties. 1. The signs are perceptible or sensible items, whether written or spoken (or today, computer-coded). 2. They comprise a recursive function, i.e. there is a rule whereby any other numerical item can be generated. 3. One or more of the earlier signs, below twelve, must be correlated with an authentic concept of number.²³ In his overview of Husserl's writings between the early 1890s and 1901, Dallas Willard concludes:

Further examination... will show that it not only provides a general statement of the problem of the possibility or objectivity of knowledge as this was conceived by Husserl, but also lays down the framework of a solution to it by initiating the treatment of the cognitive act as a complex

²¹ David Bell, *op. cit.* p. 54. This overly brief summary of aggregates owes much to Bell's excellent exposition of this topic, pp. 31-59.

²² Husserl, in fact, claimed priority in his discovery of the concept of figural moments or gestalts; see Theodor de Boer, *The Development of Husserl's Thought*, trans. by Theodore Pantinga, The Hague: M. Nijhoff, 1978, p. 23, note 4, citing: LI. 442 & 480. See also Husserl's letter to Oskar Kraus, editor of Franz Brentano's *Psychologie von empirischen Standpunkt*, vol. III (1929); English edition, *Sensory and Noetic Consciousness*, trans. by Linda McAlister, RKP, 1981, p.90, note 2.

²³ On the concept of recursion in linguistics, for instance, see Noam Chomsky, *Language and Mind*, Rev. ed. HBJ, 1972, pp. 60-5.

whole exhibiting *necessary* connections between its *parts* as well as in relation to other acts -- necessary connections which are moreover treated as open to rational insight.²⁴

It is to this sign-aspect of math/geometrical cognition that Descartes will appeal in his resolution of the problem of how deductive thinking can maintain its grasp on previously secured intuitions. It is this signitive function to which he refers in Rule XII, after considering knowledge with respect to the knowing subject's faculties, as "abbreviated representations"; something like astronomers' "imaginary circles" which they use to describe celestial phenomena. [CSM I. 43] These are figures or schemas which synopsise all the particular cases to which they could be applied *and* provide a focal point which itself can be entirely one content of an intuition. L. J. Beck, in the course of a rather prosaic account of simple natures, makes this rather startling and incisive remark:

There are, Descartes seems to be saying, certain simple natures which *symbolize in letters* the language of reality, an alphabet or, as Leibniz was later to name it, a *characteristica universalis*. The simple natures are then characteristics recognizable in all bodies and in all minds, or all existents whether corporeal or spiritual. They are universal, as is clear from the examples, but yet in some sense they have ontological status, they are simple entities which are the fundamental constituents or elements of all bodies, of all minds, of all that exists.²⁵

It is their double-sidedness as symbolic terms and as ontological constituents which permits simple natures to be recategorized later, in Theorem 8 of Rule XII, as features of judgements made about them, but there in such diverse guises as: linguistic signification, part-whole relations, and geometrical/numerical concepts. Unfortunately, Descartes never reached the promised place in the composition of the *Rules* where a fuller explication of this symbolic function could have been presented. William Shea, however, in *The Magic of Numbers and Motion*, has cogently argued for the notion that these "abbreviated representations" or "symbolic letters" are the seeds for Cartesian algebraic geometry.²⁶

Rule XII opens with a discussion of the objects of knowledge considered from the point of view of the knowing subject's faculties. First, insofar as the external senses are all parts of the body, sensory perception is passive, in the same way in which wax takes an imprint from a seal. Second, when an

²⁴ Dallas Willard. *Parts and Moments*. p. 390.

²⁵ L. J. Beck. *The Method of Descartes*. Oxford, 1952. p. 72. emphasis added.

²⁶ William Shea. *The Magic of Numbers and Motion*. Science History Pub., 1991. pp. 148-75.

external sense organ is stimulated by an object. the figure is conveyed to another part of the body, the common sense. without any real entity being also conveyed. Third, the common sense in its turn functions like a seal, imprinting in the imagination or memory, as if in wax. the same figures or ideas which came from the external senses. Fourth, the motive power, i.e. the nerves and neural "fluids", has its origin in the brain where the corporeal imagination (and memory) are located; these latter move the nerves in various ways, just as the common sense is moved by the external senses. And fifth, the true power through which we know things is purely spiritual, one single power, which conjoins with the common sense, imagination and memory in the production of factual knowledge about the physical world.

When we consider things in the order that corresponds to our knowledge of them, our view of them must be different than what it would be if we were speaking of them in accordance with how they exist in reality. If, for example, we consider some body which has extension and shape, we shall indeed admit that, with respect to the *thing itself*, it is one single and simple entity. For viewed in that way, it cannot be said to be a composite made up of corporeity, extension and shape, since these *constituents* have never existed in isolation from each other. Yet with respect to our *intellect*, we call it a composite made up of these three natures, because we understood each of them *separately* before we were in a position to judge that the three of them are encountered at the *same time* in one and the *same subject* [i.e. subject of thought, the 'object']. [CSM I. 44; emphasis added].

Descartes here (and elsewhere) is at some pains to make a theoretical distinction between, on the one hand, the dependence (on some other thing) of some aspects of a thing as it is merely presented, or already given to consciousness; and on the other hand, the independence of those aspects one stage further in cognition, i.e. when one conceptualizes how it is that those aspects could be given as being *about* that thing. It is with this passage that Descartes introduces the eight propositions (or theorems) which comprise the ontological schema of simple and complex natures.

D1. A simple nature is that thing which can be known so clearly and distinctly that it cannot be divided by the mind into other things which are more distinctly known, e.g. shape, extension and motion. A composite nature is made up of such simples and is often seized in experience as one complete thing before we are able to isolate its simples in intellect.

D2. A simple can be either: intellectual if it is seized upon by means of an innate light and without the aid of any corporeal image, e.g. knowledge, doubt, ignorance, volition; material if it is seized upon as being present only in bodies, e.g. shape, extension, motion; or common to both intellectual and material, e.g. existence, unity, duration, logical axioms.

D3 A simple is self-evident and never contains any falsity, such that if one makes a judgement about it then one must already have adequate knowledge of it, even if one imagines there is more beyond what has been grasped.

D4. These simples can be conjoined in either a necessary or a contingent manner: necessary when one simple is somehow implied in the concept of another simple, such that one cannot conceive either of them distinctly if they are judged to be separate; contingent when one simple is not directly implied in the concept of another, such that each can be conceived distinctly whether they are separated or not.

D5. It is not possible to understand anything more than those simple natures and composites formed from their conjunction; but it is possible to have knowledge of a composite without having knowledge of all the simples which make up that composite.

D6. Knowledge of composites is gained either through experience or through construction: experience comprises whatever is perceived by the senses, learned from others, or from introspection. The intellect can never be deceived by any experience provided that the intuition of an object corresponds exactly to the way in which it is seized upon. A composite can be constructed either from simples or other composites taken from different domains (sense, imagination, memory) and judgements expressed on their account, and as such it is possible to be deceived.

D7. Composites are formed in three ways: through impulse, conjecture, or deduction. Through impulse when, in judgements about things, such judgements are not based on good reasons but merely internal or external influence; through conjecture when an observed relation between known things leads one to judge that the same relation holds with an unknown thing; through deduction when each of the things judged about is clearly intuited and the connection between them is also intuited as necessary.

D8. In the formation of composites of many different kinds (or species, e.g. substantive, causal, or propositional), deduction can only be the derivation of things from words, or causes from effects (or the

converse), or a whole from parts, or parts from other parts, or several of these at once. In the latter case of parts and wholes, this composition occurs formally in geometrical and numerical concepts.

Intuition as the pure operation of the cognitive power can grasp only simples, whether taken singly or severally when conjoined through some necessary relation. As the content of an intuition, a simple is always grasped with clarity and distinctness, that is, the whole of its nature is contained in the grasping and nothing else is contained with it. This does not imply that other simples cannot be grasped along with that intuited simple. If another simple is implied by -- or cannot be conceived as graspable without entailing that a prior simple has been grasped -- then the latter is dependent on the former and a proposition exhibiting this dependency is called analytic. If one simple is conjoined with another but without being implied by it -- such that it can be conceived as graspable without entailing a prior simple -- then the latter is independent of the former and a proposition exhibiting this is called synthetic.

In the process of deduction, where cognition "tracks" previously secured intuitions, each later term in the sequence, when it is an implication of (dependent on) the immediate prior term could be said to be *founded* on that intuition secured by the prior term. Where a later term in the sequence is founded on some prior intuition, but as the consequence of some other term which is itself founded on that prior intuition, the later intuition is *relatively* dependent on that prior founding intuition. Where the first term is itself not founded but only founding with respect to successive intuitions, e.g. the cogito, the natural light, etc. it could be said to be *absolutely* independent. [see CSM I. 22]

Descartes will much later, in a letter of 1643 to Princess Elizabeth, refer to this sort of absolute simple as, "primitive notions which are, as it were, the *patterns* on the basis of which we form all our other conceptions. There are very few such notions [extension, thought, and their union]... each of them can be understood only through itself." [CSM III. 218] Though this would be an interpolation of Descartes' taxonomy, one might find it helpful to consider these primitive notions or absolute simples as second-order concepts or, in Husserl's terms, regional categories of being. The remark that such self-founding ideas are *innate patterns* according to which other concepts are generated has profound ramifications for an understanding of Cartesian theory of knowledge as a type of phenomenological enquiry.

The conclusion of a deductive sequence is a composite (D7), not just another simple in the chain of reasons, since it cannot include all of the intuitions in the propositional form, but must synopsise or "abbreviate" the necessary connections which held between all of the intuited simples. Thus one can have certain knowledge of a composite without having, at that moment when the conclusion is cognized, knowledge of all the simples which compose the composite (D5). Though of course, one must have had, at earlier moments in the chain, certain knowledge of each simple as it was secured in intuition. Remarks about "impulse" and "conjecture" in the formation of composites pertain to the psychical and affective conditions *under which* composites are cognized; whereas remarks about "deduction" pertain to the logical conditions *by means of which* composites are cognized (D7).

All of the above observations pertain to intellectual simples, intellectual with respect not only to the mode in which they are cognized (intuition), but also with respect to their content (abstract). This is another way of stating the conjunction of D3 and the second clause of D6: a simple is self-evident, such that judgements made about it always imply that one has adequate knowledge of it and the intuition of an object corresponds to the mode in which it is grasped. Material simples are grasped in various cognitive modes (imagination, memory, perception) but as belonging only to material bodies and thus whose correspondent cognitive mode is perception alone. [The analysis of the materiality of the piece of wax in Meditation II is an exemplary instance of this principle.] Insofar as the cognitive power is conjoined with imagination and memory, it must employ corporeal images, i.e. visual or auditory fantasies, and as such may be liable to non-correspondent cognition, hence fallible.

But irrespective of the cognitive mode in which material simples are grasped, they also bear relations of dependence and independence with regard to other simples or composites, that is, they are either separable or non-separable in understanding. An absolute self-founding simple is extension: an extended thing must have shape, motility, and colour. That some thing has these properties is founded on its being extended, though not the converse. One could not claim that in order for some body to be extended it has to have *this* shape or be in motion/at rest. A material composite is composed of material simples, each bearing founded relations with its conjoint simples; as a material thing its correspondent mode of cognition is perception.

It is possible to enumerate, not deduce, all those instances of that material thing, such that through the process of abstraction -- defined here as attention to only those dependent simples which are invariant -- one grasps the *general* concept of that sort of thing, e.g. "book", "heart", "brain", etc. [on universals, see CSM I. 212] Clarity and distinctness in the perception of a material thing is achieved when the intellect grasps that all and only those simples which are given in the perception are adequate for experience to always pick out just this composite and not any other (D1). The simples which are common to the intellective and the material will be taken up later in our discussion of Descartes' use of simple-complex natures in his explanation of the union of mind and body in Meditation VI.

Intellective, material and common simples, and composites formed from them, are all categories of simple-complex in the ideational content of various cognitive modes: in fact, they are, as such, universal concepts of simples and composites. But simples can also be considered as propositions with respect to the signitive content of judgements made about them, as well as numbers, measure and magnitude. The only comprehensive and straight-forward manner in which to account for the *Rules'* treatment of simple-complex natures in such different guises is that the relations of simples to simples, their conjunction in necessary or contingent fashion, their formation into composites, etc. comprise a formal ontology of parts and wholes.²⁷ It cannot be denied, however, that Descartes never explicitly discusses this, perhaps due to the incomplete and fragmentary character of the later Rules (after XIV), though perforce also due to the unavoidable fact that the logical basis of sign functions was not a conceptual schema available in the early 17th century.

But this is not mere retrospective wishful thinking. A glimpse, a fore-shadowing, of this formal ontology is provided by Proposition D8, which occurs twice before lacunae in the text, but which was taken up by Arnauld in Chapter 2, Part 4, of the *Port Royal Logic*. [CSM I. 77-8] It is in this context that all of the ways in which simples are conjoined with simples, in all of the various spheres of theoretical

²⁷ The only comprehensive manner to *account* for their diverse treatment should be read, of course, to pertain to the continuity of the *meaning* of simple-complex throughout so many transformations. Such an account is not designed to compete with (in fact, it endorses) the stratigraphic analysis of the composition of the *Rules* which shows that different strata fulfill sometimes divergent purposes for Descartes. See esp., John Schuster, "Descartes' Mathesis Universalis", in *Descartes' Phil., Math. and Physics*. S. Gaukroger, Ed. Harvester Press, 1980. pp. 41-2, and notes 1-5.

enquiry, are subsumed under the relations of parts and wholes. The attentive and methodical reader who has adhered to the "technique" advocated throughout the enumeration of these rules is left with this thought-provoking statement:

In order to extend the scope of [these problems] ... we must note that the word 'part' has to be taken in a very wide sense, as signifying everything that goes to make up a thing -- its modes, its extremities, its accidents, its properties, and in general all its attributes.

Where Descartes-Arnauld breaks off, Husserl begins -- though admittedly we are here jumping ahead in our explication of structural parallels in Descartes' and Husserl's ontologies. From Chapter I, section 2, of Investigation III:

We interpret the word 'part' in the widest sense: we may call anything a 'part' that can be distinguished in an object, or objectively phrased, that is 'present' in it. Everything is a part that is an object's real possession, not only in the sense of being a real thing, but also in the sense of being something really in something, that truly helps to make it up.

[LI. 437]

Let us return to the first clause of Proposition D8, that deduction can proceed from things to words, or derive words from things. As early as Rule III, simples are referred to as "propositions", or to be exact, specific simples can also be classified as propositions about abstract ideas, some of which can be further classified as absolute or primitive notions, e.g. logical axioms. Propositional simples can also be combined to form composites, that is, in the subject-predicate format, where the predicate is not an analytic implicatum of the subject.

Descartes has very little to say on this topic in the *Rules*, apart from a brief excursus on expression and denoting in Rule XIV. [CSM I. 61] With respect to non-analytic propositions, i.e. those not available to clear and distinct cognition of intellectual simples, he remarks that one should employ the terms with the help of the imagination. For when the intellect attends adequately to what the word *denotes*, the corporeal images in the imagination direct the intellect toward the *other features* of the thing which are not conveyed by the term, i.e. those contingent simples and composites formed from them. It would be more accurate to say that: a) the *expression* of a proposition is conveyed in verbal or graphic

signs which, solely in terms of their verbal or graphic features, are arbitrary and graspable only by linguistic convention. [CSM I. 81]; b) the *content* of a proposition is not itself either a simple or a composite, but what the parts of the content denote are indeed simples and composites; and c) as such, the *meaning* of what the content denotes is clearly and distinctly conveyed by its correspondent intuitions.

For a more general context in which to situate these remarks about language, one must turn to a letter to Mersenne of November 1629, some short time after the *Rules* had been abandoned. In response to an unknown author's project for a new language, which mainly comprised some sort of Esperanto-polyglot dictionary, Descartes argues that the discovery of such a "universal" language presupposes a well-grounded philosophy.

For without that philosophy it is impossible to number and order all the thoughts of men or even to separate them out into clear and simple thoughts, which in my opinion is the great secret for acquiring sound knowledge [*science*]. If someone were to explain correctly what are the *simple ideas* in the human imagination out of which all human thoughts are *compounded*... I would dare to hope for a universal language very easy to learn, to speak and to write. [CSM III. 13]

It is the compounding of simple ideas on the basis of these *innate patterns* (see above), spoken of here with respect to primitive notions, that would lead to a general schema of rules governing those arrangements. This task was only hinted at by Descartes, but was expanded in the most systematic fashion by Arnauld and Nicole in the *Port Royal Grammar* (1660) and *Logic* (1662). At the close of Investigation IV, "The Idea of Pure Grammar", Husserl endorses the "undoubted soundness" of a universal grammar as conceived by 17th and 18th century rationalists and, "takes up the cudgels for the old doctrine of a *grammaire generale et raisonne*." [LI. 525]

The theory of simple and complex natures is brought to bear on the concept of number in Rule XIV. The sort of differences which obtain between two or more extensions can be explained in terms of dimension, unity and shape. By dimension he means any mode or aspect of a thing which can be measured; thus length, breadth and depth, but also weight and speed, lest this concept be restricted to spatial dimensions.

Division into several equal parts, whether it be a real or merely intellectual division is, strictly speaking, the dimension in terms of which we count things. The mode which gives rise to number is strictly speaking a species of dimension.... If we consider the order of *parts* in relation to the *whole*, we are then said to be counting; if on the other hand, we regard the *whole* as being divided into *parts*, we are measuring it. [CSM I. 62]

With regard to unity (which, along with shape, is a "common" simple), all of the things which are to be considered in the problem must either share a specifiable unit of measure, e.g. two or more lengths, or any other magnitude may be specified as that to which a unit of measure may be assigned, e.g. length of line, speed of an object, etc.

Descartes stipulates that there are only two kinds of things which are thus compared with each other: multitudes [CSM translates "sets"] and magnitudes. There are two kinds of figure, the third "common" simple in comparisons of extension: the two examples of "sets" which he gives clearly indicate that they are *ordered* arrangements of discrete units, and that means independent parts (or wholes) which are grouped into greater wholes. The concept of magnitude is illustrated by figures which clearly indicate that they are to be considered as wholes whose constituent parts are exclusively dependent.

By Following Rule Seven, we can easily survey in our mind the individual parts which we have ordered, because in relations of this kind the parts are related to one another with respect to themselves alone and not by way of an intermediary third term, as is the case with measures. [CSM I. 65]

It is not to our purpose to trace the undercurrent of theory of simple-complex natures as it reappears through the *Discourse*, *Meditations*, and *Principles* -- a reassessment of its ontological significance admirably demonstrated by Jean-Luc Marion.²⁸ But this theory's continued relevance for Descartes' philosophical project is reasserted in an exemplary fashion in his discussion in Meditation VI of the way in which mind and body are united. Having defined the essence of mind as thinking and the essence of body as extension, he states that one might consider the human body as "a kind of machine", like a clock, whose actions could be explained in an entirely mechanistic manner. But the human being is

²⁸ Jean-Luc Marion. "Cartesian Metaphysics". *op. cit.* pp. 131-2.

a composite, this mind united with this body: a human being whose mind is indivisible (not composed of parts) and whose body is divisible (composed of parts).

Although the whole mind seems to be united to the whole body, I recognize that if [a part] of the body is cut off, nothing has thereby been taken away from the mind. As for the faculties of willing, of understanding, of sensory perception and so on, these cannot be termed *parts* of the mind, since it is *one and the same* mind that wills and understands and has sensory perceptions.... The mind is not immediately affected by all *parts* of the body, but only by the brain, or perhaps just one small part of the brain, namely the part which is said to contain the common sense. [CSM II, 59; emphasis added]

It is the common sense which integrates the apprehensions of material simples and composites through the external senses and makes them available to the mind, which can then formulate common natures, that is, common to the material and intellectual domains. The composite formed from an immaterial simple (the mind) and an entirely material composite (the body) can itself be made a theme of an analysis of the cognition of any composite made up of intuitively graspable simples and of material simples which are subject to error in their cognition. That an ontological analysis of the mind-body whole, similar to Rule XII's analysis of the physical thing before and after conceptualization, is called for is signalled by the word "seems"; the whole mind *seems* to be united with the whole body. That the meditator *seems* to see, to hear and to be warmed provoked him into thinking about what that apparentness consists in -- so too here. One can indeed have an intellectual simple *idea* of the mind, but the mind itself is not a simple idea, it is an immaterial simple *thing*. And what one can rightfully say about ideas and about things partly depends on where, in the process of reasoning, one comes to have knowledge of one or the other. Descartes has already warned the reader not to confuse or misplace the two formats, order of reasons and order of essences, and it is in ignorance of this that readers will have problems with the interaction of mind and body.

Every time the brain, or just the pineal gland, is in a given state, it presents the same signals to the mind, even though other parts of the body may be in different conditions at the time, he continues. But what these signals present are not isolated, unconnected sensory simples: they usually present *organized* or patterned sense data to which the mind can apply abbreviated or synoptic figures (as shown above in

Rule XIV). One of the outstanding "figures" available to our experience is that of a human being, in the famous men-under-hats trope. Just as a specific grouping of visible lines may convey to us more than a mere collection, for it conveys, e.g. the words on a piece of paper, so also a human being is presented to us as a *mindful body*, one whole which is a mind united with a body.

It can be argued that Descartes circumvents the alleged problem of interaction, in much the same fashion as the contentious issue of circularity in the proof of god's existence, because he has been at some pains to discriminate the frameworks which comprise simples and composites; that is, according to the manner in which we come to understand them and the way in which they exist in themselves. With respect to how they are in themselves: the mind is simple, single and immaterial; the body is an extended composite of material simples and composites; the human being is a composite of both an immaterial simple and an extended composite. But this is *not* how we come to understand a human being qua human. If he is not as explicit as one could wish in the Sixth Meditation, his position is quite clear in the Fifth Replies: "In fact I have never seen or perceived that human bodies think: all I have seen is that there are *human beings*, who possess both thought and a body." [CSM II. 299]

Serious conceptual confusions arise in an appreciation of Descartes' formulation of mind-body union if one mistakes the essence of mind and the essence of body as exclusively determining the essence of their union in the human being as a mindful body. This mistake begins with a misreading of the famous statement: "I have a clear and distinct idea of myself, insofar as I am simply a thinking, non-extended thing; and ... I have a distinct idea of body, insofar as this is simply an extended, non-thinking thing. And accordingly, it is certain that I am really distinct from my body and can exist without it." [CSM II. 54] It is easy and natural to read this "I" as this person, the meditator, instead of from the somewhat unnatural (i.e. methodically reduced) stand-point, as this mind which has uncovered these essential features through an elaborate process of abstraction.

This discursive abstraction is reiterated in the further statement that, "I am not merely present in my body as a pilot is present in a ship, but that I am very closely joined and, as it were, intermingled [*permixtio*] with it, so that I and the body form a unit." [CSM II. 56] It should be very clear from the last clause that "I" refers to the mind alone, which with the body forms a unit. Reading the mind alone for "I"

in the above two passages gives a much different picture than reading person or human being for that same "I". It is rare in Meditation VI for Descartes to talk about this "unit", the human being. Virtually the entire discussion is taken up with the essential natures of the two things which make up the unit. One hint, that is only fulfilled much later, is that it is, "quite certain that my body, or rather my *whole self*, insofar as I am a combination of body and mind, can be affected by the various beneficial or harmful bodies which surround it." [ibid]

This last phrase points the reader to a much later work, *The Passions of the Soul* (1649), which explicitly discusses the "whole self". As a natural scientist, Descartes made great efforts to explain the interaction of psychical and physical events at an hypothesized brain site, the pineal gland. But irrespective of the success or failure of this mechanistic account, he provides a profound, if sometimes cryptic, explanation of how mind and body can co-exist in one whole self. It is a distorted and unjustified caricature of so-called Cartesian dualism to reduce the latter explanation to the former hypothesis. For commentators to observe that there are serious deficiencies in the *causal account* of actual psychophysical interactions, especially in the domain of sensory perception, is one thing; to insist that an adequate *description* of the mindful body is liable to the same sort of problems, is another issue. Recent studies by A. O. Rorty²⁹ and Michel Henry³⁰ have done much to correct this pervasive misconstrual and to point the reader of Meditation VI straight to Part One, section 30, of *The Passions*.

Descartes first wants to carefully delimit the actions of the mind from the passions in the most general sense. Mental actions are, properly speaking, predicated only of volitions which the mind undertakes with respect to its thoughts. The passions, on the other hand, are of three sorts: sense perceptions, bodily sensations, and the emotions. Sense perceptions refer to things outside the body which produce certain movements in the external sense organs and hence correspondent movements in the brain. Bodily sensations, such as hunger, thirst, pain, etc., are not predicated of things outside the body; their essential characteristics are not to be found in objects, although of course, sensations may be caused by the

²⁹ A. O. Rorty. "Cartesian Passions and the Union of Mind and Body", in *Essays on Descartes' Meditations*. A. O. Rorty, Ed. Univ. California Press. 1986. pp. 513-34; "Descartes on Thinking with the Body" in *Cambridge Companion to Descartes*. pp. 371-92.

³⁰ Michel Henry. "The Soul According to Descartes", in *Essays*, Stephen Voss, Ed. pp. 40-51; and "Videre Videor", in *Genealogy of Psychoanalysis*. trans. by Douglas Brick. Stanford Univ. Press, 1993. pp. 11-40.

presence or absence of those objects. The passions proper are the emotions, such as anger, sadness, joy, etc., whose essential characteristics are predicated entirely of the soul. There is an *auto-affectivity* to the emotions, comparable to the self-evidentiality of the cogito, which is indicative not of the mental nor of the physical domains alone, but of the person as a *mindful body*. "We cannot be misled... regarding the passions [emotions] in that they are so close and so internal to our soul that it cannot possibly feel them unless they are truly as it feels them to be." [CSM I. 388]

If sense perceptions, which are unreliable and excluded by the first stage of methodical doubt, were the only kind of passion, then it would be valid to conclude that the mind is conjoined with only one part of the extended body, whether the pineal gland or any other site. But that gland is in fact a functional *part of a whole* extended body whose boundaries and conditions are discovered through bodily sensations and emotions. In terms of the whole person, the mind is intermingled with (*permixtio*) the whole body as its (the person's) own extension. According to the order of reasons, as developed through the *Meditations*, clear and distinct knowledge of the essence of mind and the essence of body reveal a *real* distinction between the two, such that they can be conceived as existing independently of each other. But according to the order of essences, clear and distinct knowledge of the whole person reveals that the whole mind and the whole body are related as inter-dependent parts which contribute to a functionally greater whole. [see CSM I. 339]

The passions proper [the emotions] reveal that the entity formed by the mind's pervading its own body can form a single whole, a unity whose distinctive benefits and harms are not reducible to those of its contributing constitutive substances. The passions show that the mind is not only permixed with the body but that, taken together, mind and body form a whole with interlocked functions, directed to the well-being of that whole. The we who is served by the passions is not only the machine organism, but the combined mind-and-body, taken as a composite whole.³¹

The issue here, with regard to simple-complex natures, is to understand how the mind-body union of a person is experienced through apprehensions of various "common" natures which partake of

³¹ A. O. Rorty. "Cartesian Passions", *op. cit.* p. 518.

both the material and immaterial domains. In other words, to experience a human being qua person is to understand that he is corporeal, living and conscious. Serious and irrefragible problems arise when a univocal and unilateral conceptual schema, i.e. physical versus psychical, is brought to bear on a unified mindful body. Entirely physicalistic and reductionist accounts can never adequately "build in" consciousness and hence are prone to dismiss it as epi-phenomenal, a product of an imperfect explanatory hypothesis which further empirical research can remedy. On the other hand, entirely immaterialist or anti-physicalist accounts, though less common, are inevitably faced with the enigma of the soul's insertion in a shared socio-historical world whose linguistic meanings, for example, are the result of inter-subjective production.

Let us return to our second point of departure and follow another explorer's lead in the ontological domain. The process by which Husserl came to formulate a general theory of parts and wholes has been outlined above with reference to the kind of cognition that takes place in mathematics. It should not be assumed that Investigation III is the *fons et origo* of all latter-day part-whole theory. Husserl was certainly aware of, and sometimes commented on, earlier theoretical work, especially Carl Stumpf's "Über den psychologischen Ursprung der Raumvorstellung" (1873), Twardowski's "Zur Lehre vom Inhalt und Gegenstand der Vorstellungen" (1894), and Meinong's "Beitrage zur Theorie der physischen Analyse" (1893). However, Husserl's all too brief, highly condensed work stands far above these and later theories, partly because he successfully avoids internal problems, but mainly because this framework has such an extensive scope over other domains, e.g. semantic analysis, aesthetics, cognitive psychology, and so forth. Barry Smith can quite confidently declare that Investigation III is, "for all its inadequacies, the single most important contribution to realist (Aristotelian) ontology in the modern period."³²

Husserl begins by introducing two pairs of terms: part and whole, dependent and independent; it is their permutations which exhibit such powerful logical scope. Every 'object', or content of thought, can be related to another as part to whole, whole to part, or as parts of one whole. It is the way in which parts are related to parts or in which parts compose wholes that reveals whether they are dependent or independent. An independent whole is a complex 'object', i.e. divisible into parts, which can exist alone in

³² Barry Smith, *Parts and Moments*, p. 37

that it does not require the existence of any other 'object'. A dependent whole is also a complex 'object' insofar as it is divisible into parts, but cannot exist alone: it requires some greater whole of which it is a part.³³

An independent part (piece) is an 'object' or content of thought which makes up a whole or other complex 'object', which qua part can stand on its own, e.g. the handle of a teacup. A dependent part (moment) is an 'object' which makes up a whole or other complex 'object', but which cannot stand on its own, e.g. the teacup's colour or shape. With regard to material things whose wholes are concrete, parts and wholes are said to stand or exist on their own (or not) as the 'objects' of cognition; one should say perhaps that they can (or cannot) be made the content of presentations. This further points to the crucial phenomenological distinction between 'objective' and 'objectual', and the collateral paired terms 'real' and 'reell'; the two first terms pertaining to the thing itself, the two second terms to the phenomenal content.

Further refinement of the inter-connections outlined above are brought out through interpolation of other formal features: founded/founding, relative/absolute, mediate/immediate which yield these definitions and theorems.³⁴

Def. 1. If a law of essence means that an α cannot exist as such except in a more comprehensive unity which associates it with a β , then we say that an α as such requires foundation by a β , or that an α as such needs to be supplemented by a β .³⁵

H1. If an α as such requires being founded on a β , then every whole having an α , but not a β , as a part, requires a similar foundation.³⁶

³³ Peter Simons speaks of different concepts of whole also; *ibid.* pp. 121-3.

³⁴ Corrections made to J. N. Findlay's translation by David Bell. Barry Smith, and Peter Simons have been adopted here: "Theorem" instead of "proposition" for *satz*; "super-ordinate" instead of "subordinate" in Theorem 2; deleting the proof from the statement in Theorem 6.

³⁵ Adopting the convention proposed by Smith, *Parts and Moments*, p. 98, note 72; and Simons, *ibid.*, pp. 119-20: Greek letters α , β , indicate species or types: Roman letters, x , y , are arbitrary members of α , β , etc.

³⁶ Several commentators have argued for a revision of the first theorem, which would then yield: H1*. If an α as such requires being founded on a β , then every whole having an α as such requires a similar foundation.

See Peter Simons, *ibid.* pp. 142-3; and David Bell, *op. cit.* p. 99.

H2. A whole which includes a dependent moment without including as its part the supplement which that moment demands, is likewise dependent, and is so relative to every super-ordinate dependent whole in which that dependent moment is contained.

H3. If x is an independent part of (and thus also relative to) y , then every independent part z of x is also an independent part of y .

H4. If x is a dependent part of a whole y , then it is also a dependent part of every other whole of which y is a part.

H5. A relatively dependent 'object' is also absolutely dependent, whereas a relatively independent 'object' may be dependent in an absolute sense.

H6. If x and y are independent parts of some whole z , then they are also independent relative to one another.

Although commentators conclude their outline of Husserl's formalized theory here, as presented in section 14, section 15 is entitled "Transition to the treatment of more important part-relations". Simons is surely right in stating that, "though Husserl moves on to discuss other whole-part notions... these will obviously inherit any ambiguities possessed by the basic notions."³⁷ Nevertheless, Husserl does present at least two other definitions and three theorems, distinguished in italicized blocks. [LI. 483-5]

Def. 2. Each part that is independent relative to a whole A we call a piece (portion), each part that is dependent relative to A we call a moment (abstract part) of this same whole A . Abstract parts can in their turn have pieces, and pieces in their turn abstract parts.

Def. 3. If $a(A)$ is a part of the whole A , then a part of this part, $a(a(A))$, is again a part of the whole, but a mediate part; whereas $a(A)$ is a relative immediate part of A . Absolutely mediate parts are such parts as must themselves enter into other parts in the whole, whereas absolutely immediate parts are such as may enter as parts into any part of the same whole.

H7. Pieces are essentially mediate or remote parts of a whole whose pieces they are, if combinatory forms unite them with other pieces into wholes which in their turn constitute wholes of higher order by way of novel forms.

³⁷ Peter Simons. *ibid.* p. 147.

H8. Abstract parts (moments) are further from the whole, i.e. are in essence mediate parts, if their need for supplement is satisfied in the sphere of a mere part: abstract parts of the whole that are not abstract parts of its pieces are nearer to the whole than the abstract parts of the pieces.

H9. The fragmentation of a dependent moment conditions a fragmentation of the concrete whole, insofar as the mutually exclusive pieces, without themselves entering into a foundational relation with one another, attract new moments to themselves in virtue of which they are singly distributed to pieces of the whole.

The great power and scope of this schema, which has inspired so many later workers in the field, lies in Husserl's essential insight into the purely formal a priori character of the relations which hold between any sort of part and any sort of whole. These a priori regularities have such heuristic scope due to the critical distinction between dependence and independence, a distinction grounded in the definition of foundation. Throughout his discussion, Husserl takes the term 'object' in the widest possible sense (too wide, in fact, for some critics) to include both mind-independent objects existing in the outer world -- which is what he does *not* talk about -- and the phenomenal 'objects' which are present to consciousness, the proper domain of a phenomenological enquiry. Within this domain, a further distinction is made between the psychical act and its content, essential *parts* of the intentionality of consciousness. An even more refined partition is made later, with respect to the content alone, amongst its 'object', its material and its essence.

The psychical act which presents a concrete 'object', e.g. the phenomenal apple, is immediate and independent since it does not need, i.e. require foundation in, any other presentations. Whereas the act which apprehends an abstract content, e.g. redness or roundness, is mediate and dependent since it does require the presentation of a concrete 'object'. Concrete 'objects' can be either wholes, which one thinks of as individual, self-subsistent things, or parts of wholes; as such, independent concrete parts are called 'pieces'. Abstract contents are not thought of as individuals which can exist on their own, though through the process of ideation they can be thought of in terms of universals which are instanced in specific 'objects'; as dependent parts they are called 'moments'. The skin, seeds, pulp, etc. of an apple are pieces of the whole apple, that is, parts in the sense that the whole apple requires their presence, but independent in

the sense that they can exist apart from (sic) the whole: though of course that apple no longer exists when so pieced. On the other hand, the redness and roundness of the apple are moments of the whole, since being red and being round as such cannot exist without something whose colour and shape they are. This does not imply that they cannot be *thought of* separately, since of course the 'concept' redness or roundness can be conceived apart from any red or round 'object'. Let it also be noted that a piece of that whole apple, whether just the skin or a segment, can also have both pieces and moments.

At first glance, this might seem to be an elaboration of the notions of primary and secondary qualities, and moreover to not be terribly illuminating. But Husserl's concern is not merely with simple and complex concrete things. The formal character of the theory and its a priori laws of essence mean that such ordered structural relations, as outlined above, hold also within other cognitive domains and higher-order objectivities. These latter comprise, for example, the perceptual field of consciousness, mathematical and geometrical constructions, propositional meanings, complex highly organized individuals (human beings), classes of individuals, and masses or collectives of non-individuals (or "dividuals", to borrow Jonathan Lowe's term). The fact that an apple always appears within a field of other co-perceived objects, and as standing out due to the advertence of attention, this also indicates a relation of essential dependence between the whole apple and the whole perceptual field. That a group of apples (or, more clearly, a group of dots) organized in a specific manner, though entirely separate from each other, will always be perceived as forming a determinate figural shape or gestalt: thus that the gestalt is dependent on a certain ordered relation between all of its constituent moments.

Of great interest here is the recension of linguistic meaning in light of these formal features: part/whole and founding/founded:

[These] yield the necessary foundation for the essential categories of meaning on which... a large number of a priori laws of meaning rest.... These laws, which govern the sphere of complex meanings, and whose role it is to divide sense from nonsense, are not yet the so-called laws of logic in the pregnant sense of this term: they provide pure logic with the *possible meaning forms*.

[LI. 493]

Husserl first distinguishes the *expression* of a statement as composed of sensuous (audible) parts from its meaning. An investigation of the former is a matter for descriptive psycho-physiology (later codified in phonology³⁸), but he does hint at some key aspects of the sensuous manifestation of language: stressed/unstressed contents and the manner in which such contents are blended. [LI. 450-3] Meaning, however, only pertains to an expression in virtue of the mental acts which give it sense. It would be incorrect to think that Husserl wants to *reduce* meaning to the mental acts which find their "voice" in the speaker's utterance. For he does mark the crucial dichotomy between what an expression *intimates*, i.e. what it indicates about the speaker's mental and emotional states, and the 'objectivity' to which the statement *refers* by way of its meaning.

A statement is composed of parts, bound together by syntactical rules, which can be either independently or dependently meaningful. Singular terms and complete sentences, the linguistic substrate for the statement, are independently meaningful, that is, a singular term can "constitute the full, entire meaning of a concrete act of meaning." Whereas other kinds of parts, e.g. connectives, prepositions, adverbs, etc., are only dependently meaningful, since they require other terms to complete a content which can be made the 'object' of a presentation.

The a priori laws which govern the combination of independent and dependent contents partially determine the sense (or nonsense) of the whole statement of which they are parts, insofar as these laws are in accord with the given syntax of the language. But they cannot of themselves determine the validity or absurdity of such lawfully formed combinations. Thus the statement, "That thing is a round square", is syntactically correct, i.e. has not violated any of the rules for sentence formation, and yet it cannot be made the meaningful content of a presentation. Because intentionality as such is composed of both the mental act and its content, an *intuition* of the content as such-and-such can be compatible with another content only insofar as these *intuitions* are in accord with purely formal logical laws.

An intuition, as the fulfilled content of an intention which grasps the 'object' precisely in the manner in which it is given (cf. D6) can be directed not only toward the concrete, singular 'object' -- whether in perception, phantasy or memory -- but also toward abstract, universal 'objects' which function

³⁸ See, Elmar Holenstein. *Roman Jakobson's Approach to Language*. Indiana Univ., 1976. pp. 164-78.

as species for which particulars are either individuals (independent components) or moments (dependent components). It is in terms of universal propositions that Husserl formulates a priori laws pertaining to the conjoining of such contents in either necessary or contingent connection (cf. D4). An analytic proposition is one whose truth is completely independent of the specific content of their 'objects' and of any possible existential assertion. A synthetic proposition, on the other hand, is one whose truth is indeed dependent on the specific contents of their 'objects', which may be necessarily connected, but which also may be empirical specifications, i.e. with factual delineations.

This is by no means a complete survey of part-whole relations in the realm of propositional meaning, but a broad overview of the main constituent features. "What, as it were, *breathes life* into this situation are the mental acts, and in particular the moments of those acts called their act-matters, which are the source of all intentionality."³⁹ A poignant and thought-provoking statement, which has its literal fulfilment when we turn to Husserl's explication of the way in which mind and body are conjoined in the human person. It is not to our purpose to trace the complex reticulations of parts and wholes through various topical analyses, nor to explore the more recent research into a well-developed, mature part-whole theory.⁴⁰ This conceptual schema does re-emerge, however, in an unusual, even unexpected manner in his discussion of the psycho-physical constitution of the mindful body.⁴¹

The thoroughly intuitive unity presenting itself when we grasp a person *as such...* is the unity of the *expression* and the *expressed* that belongs to the essence of all comprehensive unities. This body-spirit unity is not the only one of this kind.... The book with its paper pages, its cover, etc., is a thing. To this book there does not append a second thing, the sense; but instead the latter, in *animating* it, penetrates the physical whole in a certain way.... The spiritual sense is, by animating the sensuous appearances, fused with them in a certain way instead of just being bound with them side by side. [Ideas II, 248-9]

This analogy between a text and its sense, and the mind-body unity picks up on the previous distinction between the expression of a statement and what is expressed through it; as well as the

³⁹ David Bell. *op. cit.* p. 141.

⁴⁰ See esp., Peter Simons. *Parts: A Study in Ontology*. Oxford Univ. Press, 1987. pp. 162-71.

⁴¹ For a detailed exposition of Husserl's notion of a person as a mindful body, a discussion of the texts in *Ideas II* compatible with our analysis, see David W. Smith, "Mind and Body", in Smith & Smith. *Cambridge Companion to Husserl*. Cambridge, 1995.

tangential notion of fusion or blending [LI. 450-3], whereby abstract parts are capable of mutually interpenetrating throughout the whole. Some of the phrases should be familiar and remind the reader of Descartes' remarks on both linguistic expression/denotation and the permixture of the whole soul in the body.

Though this analogy may at first point toward the cultural sphere, i.e. works of the human spirit such as texts, it also indicates a fundamental mode of apperception, an experiential attitude, in which what appears to the senses is not merely a neutral phenomenon, but is already signitive of the appearing thing's value. The experience of a book, a sculpture, a hammer, etc. is not given merely as a perceptual grasping of its physical qualities to which a grasping of its meaning or value is added as a surplus or "appendix". Rather, it is given in one comprehensive (literally, "grasping-with") experience of the thing as already *animated* with its sense. This also holds for non-perceptual intuitions of non-concrete, spiritual 'objectivities', e.g. the remembered or phantasized sensuous tones of a melody. A similar, though more complex and reflexive apperception takes place in the experience of another human being; reflexive, in that a human being is not only sense-endowed but also sense-*giving*, e.g. in writing the book, making the hammer, etc.

The apperception of a human being is accomplished through the medium of his phenomenal body but is directed as well, in the same intentional act, towards his spirit as that which animates the whole being, in his actions, speech, movements, and so forth. The apperception of a human being is not that of one thing (the body) conjoined with another thing (the spirit), but of a whole thing whose every bodily movement is imbued with spirit. The ambiguity of the word "sense" here is highly significant; with respect to the human being, it connotes the *meaning* conveyed by the mindful body whose referent is the body alone; and it connotes the *sentient*, i.e. the sense-endowed aspect of just this certain kind of being.

The physical unity of the body there, which changes in such and such a way or is at rest, is *articulated* in multiple ways.... And the articulation is one of *sense*, which means it is not of a kind that is to be found within the physical attitude as if every physical partition, every distinction of physical properties would receive significance.... Rather the apprehension of a

thing as a man... is precisely such as to animate multiple, though distinguishable, moments of the appearing corporeal objectivity and to give to the individual sense a psychic content. [*ibid.* 253]

Note the embedded terms "partition" and "moment", part-whole terms which have decisive repercussions when Husserl comes to argue against parallelism and interactionism. A transition is effected here comparable to that in the Fifth *Cartesian Meditation*, from the apperception of a human as a mindful body to the transference of this apperception to one's own person, via the operation of empathy. Although this would take us into the domain of the intersubjective constitution of the social world, and thus away from the specific focus of this research, it is worth touching on this crucial juncture in Husserl's later work. In brief, the apperception of the other as a mindful body embraces also the co-apperception of implicit but essential features of the other as a being like myself. And this means that my mindful body is an 'object' for the other, within the horizon of other co-perceived use-objects and value-objects, in just the same way in which the other was constituted for me. This knowledge of myself, as co-apperceived by the other through empathy, is completely different from knowledge of the self gained through introspection; only through the former can one take one's place in the socio-cultural world.

In general, the lived-body is a two-sided reality [*ibid.* 297] when abstracted from the fact that it is a mere thing, explicable and definable in light of its physical nature. It is constituted by the sensing or sensitive body and the volitional or freely moving body. The soul also has two facets or aspects: as physically conditioned and thus dependent on the physicalistic body-as-object, and as spiritually conditioned and thus independent of physicalistic determinations. There are thus two poles towards which these paired realities can be oriented: physical nature and spiritual nature (one pole), and the lived-body and *its* spirit (the other pole). Insofar as the lived-body and its spirit are turned towards, that is, made the theme of "scientific" enquiry in physical nature its relations to this "primary" environing world are explicable in terms of "natural" regularities, e.g. causal laws, temporal bounds, etc. But insofar as they are turned towards the spiritual environing world, comprised of created and valued 'objects', the meaning of the lived-body and its spirit are explicable only as "things" which confer meaning and value.

The theoretical object, *human being*... which is included in the theoretical positing of nature, is specifically something other than the theoretical object, *human person*. The human being as an

object of nature is not a subject, a person, though to every such object a person *corresponds*; so we can also say that every one of them 'involves' a person, an ego-subject, which however is never a component part of nature, contained as a reality in nature, but instead is something that is *expressed* in the enviroing object, 'human body'. [ibid. 301]

This is a crucial passage and synthesizes many points made earlier about both Descartes' and Husserl's conceptual schemas. Note especially the harmonious phrases: for Descartes, the mind is permixed with one immediate portion of extension, its own body; and for Husserl, the ego-subject is expressed in an enviroing object, the lived-body. A profound misconception can take place when the spirit as the expressed and the lived-body as expression are articulated in the same *order of discourse*. No more should we take the sensuous percepta of a word or a text for the meaning of that word or text, than we should conflate the physical, living body with the mindful presence which "breathes life" into it. The mindful body *takes part in*, but is not *a part of*, physical nature, though it is instanced in the "closest fitting" enviroing object, its own body.

This is exactly parallel with Descartes' notion that the simple, immaterial mind effects and is effected by the extended, material world due to the fact that it does *take part in* that world through a specific portion of extension, its own body, i.e. the mind's most immediate environment. It is also reminiscent of Descartes' complaint that a correct understanding of mind-body connection presupposes that one has already clearly and distinctly grasped the difference between order of reasons and order of essences. According to the former, so vividly displayed in Meditation VI, one can arrive at definitions of mind and body which construe them as disparate and isolable. But according to the latter, one can re-employ these hard-won insights to realize that, as these things are in themselves, they are not disparate parts but distinct *kinds* of parts of one whole; and not isolable, except post facto, since they are always given to consciousness as intimately conjoined in the real human person.

In the last sections of *Ideas II* [302-16] and in Appendix III of the *Crisis* [315-34], Husserl focuses on the concepts of dependence and independence in order to refute parallelism and interactionism as solutions to the alleged Cartesian mind-body problem. Psycho-physical parallelism claims that for every conscious experience in C., there corresponds an organic brain state in B., and that regularities which govern succession of bodily sensations, perceptual events, etc. as given in experience are isomorphic with

those which determine the brain states. As such, any given conscious experience is dependent on its coordinate brain state. However, this model tacitly presupposes a psycho-physical world of monads: once the concept of empathy is introduced we recognize that other persons' consciousness of us is an essential component of how we understand ourselves.

In fact, our awareness of other lived-bodies as objects in the natural world includes the analogical awareness that they are also subjects of their own experiences. This inter-subjective *empathy* cannot be a component in a psycho-physical parallel model since it is not determined by any correlative brain state. Moreover, the changes in the brain are contingent in that they operate according to natural laws which could be otherwise. But with respect to the retention of experiences, linked according to a priori temporal succession with specific impressions, what is conditioned is only the *content* of the experiences or sensations, not the necessary linkage itself.

"On such grounds, it seems to me, one can radically refute parallelism and the refutation thereby has a completely different style than the usual ones which... head directly for interactionism, as if the question of parallelism versus interactionism were a radical and exhaustive one." [*ibid.* 308] Husserl's rejection of parallelism in arguments for an uncritical conception of mind-body dualism relies on earlier arguments he brought against a psychological derivation of logical laws: conflation of the factual psychical conditions under which a logical law is cognized with the "ideal" non-temporal content of such laws. Husserl's dismissal of interactionism is to some extent, at least in its discursive setting, an echo of Descartes' resolution in *The Passions*, in terms of the auto-affectivity of bodily sensations and the emotions. "Surely not only are the sensuous sensations in the stricter sense determined by the body, but so are the sensuous feelings as well, and the lived experience of instincts. Surely a good part of individuality also belongs here, namely the sensuous dispositions with their individual habitus." [*ibid.*]

A third and novel way through these two specious models for mind-body union is provided by a radical rethinking of the individual located both spatially and temporally within the world horizon. A particular thing in the natural sense has its essence in the manner revealed by intuition as a thing with some determinate spatio-temporal properties, once adequately grasped, always certainly known. But an individual, a human person in the spiritual sense, does not have its own essence in advance, it is always

underway and not at all graspable in pure 'objectivity'. Rather, because of its subjective, meaning-conferring character, oriented towards the not-yet given of all its *possible* determinations, it has an *open essence*. The problematic of the relation between mind and body can be made the theme of another phenomenological enquiry -- the nature of personal identity over time. Remarks on the necessary linkage of contents in memory, the constitution of an intersubjective world of socio-cultural artefacts already constructed, point in this direction. No acceptable solution to the problem of personal identity can be given if one has already accepted parallelism or interactionism as sufficient explanation for the soul's insertion in and exchange with the natural world.

CHAPTER 5

CARTESIAN IDEAS:

DOUBTFUL MATTERS AND ACTS OF DOUBTING

Here is a little-studied aspect of Cartesianism: that of knowing how the soul possesses its own ideas. There have been many arguments as to whether clarity and distinctness were sufficient signs of truth and in what case divine veracity had to lend them its guarantee.... The nature of the act in which the I grasps its ideas and itself has been less extensively investigated.¹

Although Gaston Berger made this observation more than sixty years ago, this little-studied aspect has not been accorded more study. If anything, Berger's remark has been virtually ignored and the "many arguments" have gone on proliferating. Until quite recently, Anglo-American scholarship on Cartesian ideas, including the "class" of ideas which are the focus of methodical doubt, has been almost exclusively devoted to explicating a problematic which the scholarship itself generated. From the earlier period of Russell, Ryle and Austin to the more recent work of Hintikka, Gewirth, and Kenny², discussions of the method of doubt, the matter which is called into doubt and the certitude of the cogito are almost unrecognizable as being about Descartes' own arguments. These highly influential "versions" of what Descartes *really meant* by such-and-such, or what he could only have meant if his argument were to work, seemed to have pursued an agenda of their own device. This is *not* to imply that they have not generated valuable and provocative insights within their own field of discourse.

Partly in response to a different tradition, recent interpretative efforts by Edwin Curley, Marjorie Grene and Gary Hatfield³ (amongst others) have provided a much-needed corrective to this prevalent

¹ Gaston Berger. *The Cogito in Husserl's Philosophy*. trans. Kathleen McLaughlin. Northwestern Univ. Press, 1972. p. 65.

² Hintikka, Gewirth, and Kenny articles in: Willis Doney, Editor. *Descartes: A Collection of Critical Essays* N.Y.: Doubleday, 1967.

influence. To a greater or lesser degree, this remedial, almost rehabilitative research owes an enormous debt of gratitude to the singular achievement of Martial Gueroult's *Descartes selon l'Ordre des Raisons* (1953; 2nd edition, 1968).⁴ It could be argued that any serious reader who devotes his attention to this extraordinary exegesis of the *Meditations* would be incapable of coming away with his view of Descartes unchanged; Gueroult's reading has decidedly effected the shape of the present research.

Of the many English language scholars of Descartes, L. J. Beck, more than thirty years ago, is one whose commentary is entirely resonant with the French research of that period, especially in his emphasis on reading the *Meditations* according to Descartes' own injunction to follow the order of reasons: "M. Gueroult in his magisterial work... distinguishes two techniques for the historian of philosophy: 'la critique (probleme des sources, des variations, des evolutions, etc.)' and 'l'analyse des structures'.... No student of Descartes can neglect this magnificent analysis. ... I would accept the 'analyse des structures' as the primordial task of this study."⁵ Marjorie Grene makes a comparable observation about previous Anglo-American discussions of Cartesian topics such as doubt and the cogito and acknowledges her own debt to Gueroult's revaluative procedure. In light of this, she points out two fundamental errors in the standard interpretation of Cartesian ideas: the confusion or conflation of a judgement with the act of judging; and the fact that the *Meditations* follows an order of reasons.

[First] if we are to understand Descartes' argument we must keep this distinction in mind: for both in the Fourth Meditation and in the Second (in the hats and cloaks passage) it is the *mental act of judging* he is concerned with rather than *judgements* as surrogate for logicians' propositions or linguists' sentences.... [Second] when we take judgements as the sole locus of truth, we overlook altogether the nature of Cartesian method. Descartes' method was... "a new way of ideas". It was a way of ideas, and it was new. The unit of knowledge, and especially of the

³ E. M. Curley, *Descartes Against the Skeptics*. Oxford: Blackwell, 1978. pp. 46-69, 116-24; Marjorie Grene, *Descartes. [Philosophers in Contexts Series]* Harvester Press, 1985. pp. 3-45; Gary Hatfield, "The Senses and the Fleshless Eye", in A. O. Rorty, Editor, *Essays on Descartes' Meditations*. Univ. California Press, 1986. pp. 45-80.

⁴ Martial Gueroult, *Descartes According to the Order of Reasons*. trans. Roger Ariew. two vols. Univ. Minnesota Press, 1984.

⁵ L. J. Beck, *The Metaphysics of Descartes*. Oxford, 1965. p. 22, note 1.

path to knowledge -- the path of analysis -- is what its discoverer earlier called an *intuition* and later a *clear and distinct idea*.⁶

Our previous discussion in Chapter Two showed that one of the main complaints which Descartes had against the skeptics and neo-skeptics was their inability (or unwillingness) to discriminate between the act of judging and the judgement, between the *positing* of the judgement and what the judgement was *about*. This complaint was echoed by Husserl's charge that the empirical psychologists persistently confused the factual contingent origin of logical rules with the necessary a priori character of the logical rules themselves. Chapter Three highlighted the *methodological disparity of the order of reasons and the order of essences*, a disparity the non-observance of which, Descartes repeatedly emphasized, will permit or even encourage readers to misunderstand the presentation of arguments in the *Meditations*; and hence generate some of the objections which his contemporaries brought against him.

Descartes was certainly aware of an ambiguity in the word "idea", an ambiguity which could allow a lack of clarity and distinctness in the very idea of "idea" itself. He thus cautions the reader in the Preface: "'Idea' can be taken materially, as an operation of the intellect, in which case it cannot be said to be more perfect than me. Alternatively, it can be taken objectively, as the thing represented by that operation." [CSM II.7] This caution is directed towards a passage in the Third Meditation where he is considering the various possible sources of his ideas, whether innate or otherwise. "Insofar as the ideas are considered simply as modes of thought, there is no recognizable inequality among them.... But insofar as different ideas are considered as images which represent different things, it is clear that they differ widely." [CSM II.27-8] Let us quickly point out that here the distinction is being made, not with respect to ideas as *images* (which is a further distinction *within* all idea-contents), but with respect to ideas of any sort as *representative*. In his Replies to the First Objections, it is to this passage that Descartes refers in his explicit discrimination of, "the determination of an act of the intellect by means of an object [from] the object's being in the intellect in the way in which its objects are normally there." [CSM II.74-5]

⁶ Grene. *op.cit.* pp. 5-6; see also, Hatfield. *op.cit.* p.53.

The expansion of the technical sense of 'objective' reality of an idea as the way in which the intellect's 'objects' are normally there points to a decidedly phenomenalist account of the intellectual domain, i.e. strictly in terms of these 'objects' *appearance* to consciousness. Editors of the *Meditations* usually footnote this passage in the Third Meditation with reference to the scholastic definitions of 'objective', 'formal', and 'eminent' reality. Although it is probably the case that Descartes utilized his scholastic training to intercalate a conceptual distinction which is required in this context, the context itself is entirely novel. The *Meditations* is the first working out of an account of certain knowledge as the product of the immanent data of consciousness, without presupposing an external or underlying reality towards which consciousness has an as yet unknown relation. These highly refined scholastic terms have to undergo some sort of transformation. Perhaps then this 'objective' reality should be *bracketed*: both graphically in the use of single quote marks and thematically, that is, as that which has undergone a phenomenal *epoche* or suspension. This is precisely the ground-breaking stage achieved by the highest level of doubt and what is achieved within it will take on a novel sense.

Husserl acknowledges this self-founding domain of the phenomena as the point of departure in Descartes for a strictly phenomenological investigation. In his meditations on Descartes' *Meditations*, Husserl reconfirms the radicalness of this conception of philosophy's enterprise, a radicalness which demands an "absolute universal criticism". Descartes' uncompromising adherence to the method of doubt in order to abstain from all positions which already presuppose an existent world "out there", produces "a universe of absolute freedom from prejudice". Adherence to this principle restricts his meditative investigation to the phenomenal data of consciousness which must be taken precisely as given without recourse to a post-theoretically justified world beyond the data given. Another way to put this: Descartes cannot rely on what he will only demonstrate in the Sixth Meditation, the existence of material things in the natural world, in order to facilitate adequate conceptual distinctions in the Second Meditation. Husserl claims that this abiding with the phenomenality of thought opens up for Descartes a proto-conception, a fore-shadowing of the intentionality of consciousness, in terms of the two correlative sides of the cogito - cogitatum.

On the one hand, descriptions of the intentional object as such, with regard to the determinations attributed to it in the modes of consciousness concerned, attributed furthermore with corresponding modalities... (for example, the modalities of being)... This line of description is called *noematic*. Its counterpart is *noetic* description, which concerns the modes of the cogito itself, the modes of consciousness (for example, perception, recollection, retention), with the modal differences inherent in them (for example, differences in clarity and distinctness). [CM. 35-6]

This is not such a highly contentious reading (though the paired terms "noetic/noematic" may seem to suggest this) as to find no clear support⁷ in what Descartes discloses about the character of ideas after a universal abstention has been carried through: "The nature of an idea is such that it requires no formal reality except what it derives from my thought, of which it is a mode.... The mode of being by which a thing exists 'objectively' in the intellect [is] by way of an idea." [CSM II.28-9] The elision in the quotation occurs where Descartes appeals to the primary notion that there must be "at least as much" formal reality in the cause of the idea as there is 'objective' reality in the idea from which it is derived (of which, more later). Husserl would, of course, continue to suspend any affirmation of such an unwarranted assumption and demand that the analysis operate entirely within the suspension.

Descartes' essential insight into the two-sidedness of thinking, the cognitive act and the 'object' of that act, pertains to the entire domain of conscious activity. This domain is much "wider" than doubting as such, for it also embraces wishing, fearing, willing, and so forth: "what is doubting if not thinking in a certain kind of way?" [CSM II.415] All of the disclosures made with respect to ideas in general apply as well to doubting as a particular mode of thinking: most specifically to the distinction between act and 'object'. The act-feature of a cognitive mode may seem to be more "obvious" in the domain of memory and imagination, since in these two domains there is a *spontaneity* in the engaging of a particular memory or fantasy, a directedness in how the content, the sequence of 'objects', is played out. The act-feature in sensory perception may seem to be less "obvious" due to the essential and invariant fact that the sensed

⁷ Lilli Alanen marks the same correlation between the two senses of Cartesian ideas and the noesis-noema distinction in Husserl. See "Cartesian Ideas and Intentionality", *Acta Philos. Fennica*, 49 (1990): 348-50.

'objects' always override any seeming directedness towards them. In one sense, the connectedness of sensed 'objects', whether spatially arrayed or temporally sequenced, is an entirely contingent matter insofar as these objects are elements of the naturally occurring world and could be arranged otherwise. In another sense, the fact that these contents always override any directedness towards them is itself a necessary connection -- sensory perception as such could *not be* otherwise.

This "overriding" takes the form of either fulfilment or frustration of the perceptual act, i.e. that the idea one has of some thing is either adequate or inadequate to all of the possible sensed features of its 'object'. The act-feature in the perceptual mode is just this: the recognition that only in cases of fulfilment of the perceived content has the intentional directedness the perceptual act brought about elicited evidence for which the fulfilment is an indication of *certainty*. Descartes would perhaps formulate this in terms of clear and distinct seeing: the clarity and distinctness of an idea is the result of the ideative content being grasped by consciousness in just that mode where the ideative act could only bring forth ("illumine") just this 'object' and no more than this 'object'. Nor can this adequation of ideative act with ideated 'object' have been otherwise, hence it is *beyond doubt*.

To the extent that the term "idea" is open to ambiguity, so also is the term "doubt", though this is not spelled out in such a clear-cut, easy to footnote manner. One might choose to illustrate this ambiguity by pointing to the equivocation in the use of the word "doubtful". For example, one could say, "He is doubtful about the project", where the subject is the one full of doubt. But one could also say, "He thinks that it is a doubtful project", where it seems that the project itself is full of doubt. Of course, it is trivial to reflect that no insentient thing can be full of doubt (or fear or desire); rather, the sense of this is that the project *inspires* doubts in someone. One question here could be, *what* is it about the project that inspires doubt? The answer might implicate design flaws, financial constraints, etc. But another question could be, *how* is the inspiring of doubt in the subject manifest? What is it about the subject's attitude or orientation to the project which characterizes the attitude as doubt, and not fear or desire? Any plausible answer would have to account for features of the subject's considerative *act* and not just the content of that which the subject considers doubtful.

Although the reader or commentator could grumble, with some justification, that Descartes does make terms such as "idea", "mode", etc. do too much work, he usually emphasizes that ambiguities are inherent in their use and that this use embraces more than one sense. He was reluctant to introduce novel technical terms, one of the characteristics of scholastic textbook philosophy which he vigorously criticized. He relies almost entirely on standard literary Latin and French in order to make some very complex distinctions⁸. It is, of course, one of the great ironies of the early modern period that his groundbreaking overturn of the philosophical enterprise accomplished far more than all of the technical apparatus of the previous scholastic disputations combined.

In any case, although separate terms, e.g. for "idea" in its dual sense, might have allowed the reader to more easily pick out which sense was relevant in a specific context, he almost always qualifies the term in some way which sufficiently discriminates it from other senses and is consistent with other qualified uses of the term in other contexts. With respect to the ambiguity in the term "idea", as we have seen, Descartes distinguishes two senses: in the material sense, as an operation of the intellect; in the objective sense, as the thing represented by that operation. The remark in the Preface points forward to the pivotal role of "idea" in the elucidation of a necessary distinction *before* his proof of God's existence in the Third Meditation. The conceptual distinction made there has only been possible by following the order of reasons through the various stages of doubt and the isolation of the self-evidentiality of the cogito. He expands on this distinction in his Replies to the First Objections, where it is obvious that Caterus doesn't discriminate *within* the realm of ideas but only between an idea and the thing itself. This is one of the rare cases where Descartes does rely on a scholastic apparatus, but here it is in order to give the terms a

⁸ "I used the word 'idea' because it was the standard philosophical term used to refer to the forms of perception belonging to the divine mind, even though we recognize that God does not possess any corporeal imagination. And besides, there was not any more appropriate term at my disposal." [CSM II.127] Regarding which choice, E. M. Curley remarks: "As a Latin term, the word *idea* does not have a home in ordinary language; it is rare in classical Latin, a borrowing from the Greek.... Descartes' use of it in connection with human thought was novel and the source of much confusion among his readers." in "Analysis in the Meditations." A. O. Rorty. *op.cit.* p. 160.

radically new slant. Brentano will rely on an explicitly neo-Aristotelian interpretation of the "intentional in-existence" of an idea in order to make a very similar point -- about the intentionality of consciousness.⁹

Several recent articles have been devoted to exposition of the tangled skein of Cartesian theory of ideas.¹⁰ In order to avoid the repeated use of two rather awkward phrases, Vere Chappell designates $idea_m$ as "idea in the material sense", and $idea_o$ as "idea in the objective sense". An $idea_m$ is a mental *act* or event; an $idea_o$ is something towards which the mind is directed, that is, a mental *object*. A given $idea_m$ is that in virtue of which just this $idea_o$ is picked out and not some other $idea_o$. Chappell also distinguishes two further senses of "idea" which should be mentioned, though they are not essential to our analysis here. A third sense is that of a "corporeal image", usually spoken of in discussions of imagination and memory. And a fourth sense is that of an "innate idea", where this refers to the source or origin of an idea and is thus not a mental act or content but a cognitive faculty.

In order to have a clear understanding of what it means for an act-idea to be an operation of the intellect, it is essential that we situate the intellect within the Cartesian frame-work. This will also be helpful in allowing us to discriminate a further ambiguity in the term "act" or "activity". This larger frame is succinctly articulated in *Principles* I. 32:

All the modes of thinking that we experience within ourselves can be brought under two general headings: perception, or the operation of the intellect; and volition, or the operation of the will. Sensory perception, imagination and pure understanding are simply various [sub-]modes of perception; desire, aversion, assertion, denial and doubt are various [sub-]modes of willing.
[CSM I. 204]

⁹ Franz Brentano. *Psychology from an Empirical Standpoint*. Oskar Kraus, Editor. various trans. London: Routledge, Kegan Paul, 1973. pp.88-90.

¹⁰ Vere Chappell. "The Theory of Ideas". in A. O. Rorty. *op.cit.* pp. 177-98; Similar conclusions are reached by Lilli Alanen. "Sensory Ideas, Objective Reality and Material Falsity"; and by A. W. MacKenzie, "The Reconfiguration of Sensory Experience", both in *Reason, Will and Sensation*. John Cottingham, Editor. Oxford, 1994. pp. 229-50 & 251-72.

the way in which 'objects' are normally there." [CSM, II.74] This is a highly unusual sense of the term 'object' and it is small wonder that Caterus, Bourdin and others had genuine difficulty in grasping it. They would quite "naturally" assume that Descartes was drawing comparisons between an idea as representation and the actual thing itself. Any such assumed comparisons, however, would inevitably have had to cope with the skeptical tropes designed to destabilize any postulated standard by means of which any epistemic comparison could be evaluated. The fact that he is making an essential distinction between two aspects of an idea, its act and its content, entirely within the phenomenal domain is precisely what will allow him to make a claim about the certainty of the cogito *without* appealing to some other criterion for comparison.

There are at least two unfortunate by-products of Descartes' use of the term 'objective' to distinguish the content of an idea, that towards which the act-idea is directed. One is that it easily misleads the reader into thinking that Descartes is here referring to the actual thing itself, e.g. the sun in the sky. The other by-product of his persistent attention to the idea-content is to draw interpreters towards an almost exclusive concern with epistemological problems about the connections between ordered arrangements of ideas; e.g. the demonstration of the cogito through the stages of methodical doubt, the two proofs for the existence of God, and so forth. In effect, this is to ignore any possible descriptive analysis of the mutual dependency of act and content in one cogitatum and the interconnections between act-ideas through many cogitata, unified in the ongoing stream of one consciousness.

Let us return for a moment to one intermediate conclusion which Chappell draws here:

To be conscious is to be conscious *of* something; consciousness must have an object.... The precise object of consciousness... is not the conscious event, not the thought or idea_m but rather the idea_o that necessarily is associated with it.... It is thoughts, and hence ideas_m by which consciousness is carried in the Cartesian mind: they are its indispensable *vehicles* even if not its specific targets.¹¹

¹¹ Chappell. *op.cit.* p. 184.

The meaning of "vehicles" here relies on an equivocal sense of "contains" in the previous passage where Descartes discusses the 'objective' reality *contained* in the idea-content. It may seem strange to contemporary readers for him to qualify this containment with "at least as much" in the context: "There must be *at least as much* formal reality [in the cause of an idea] as there is objective reality in the idea." One might be tempted to interject that reality is not something which admits of degrees; some thing either is real or is not real, not more or less real. But we have to be willing to accommodate this novel sense of "reality" in much the same way that we were open to a revision of 'object' in the 'objective' sense of idea. There is a clue to this novel sense of reality in the Axioms appended to the Second Replies:

There are various degrees of reality or being: a substance has more reality than an accident or a mode; an infinite substance has more reality than a finite substance. Hence there is more objective reality in the idea of a substance than in the idea of an accident; and there is more objective reality in the idea of an infinite substance than in the idea of a finite substance. [CSM II.117]

It seems to be the case that this sense of reality implies at most a two-termed relation: that between ontological independence and non-independence. This interpretation rests on Descartes' maintenance of the ontological schema of simple and complex natures first outlined in Rule XII of the *Rules*. Whether physical, abstract or propositional, some simples are dependent on the existence (or holding true) of some greater whole of which they are parts. For example, being coloured, shaped, etc. are dependent on some thing of which they are the properties; this thing itself is not dependent for its existence on some other thing. In the intuitive understanding of the thing, one is able to abstract such properties and, in considering or adverting to each property separately, to make of this simple a single 'object' of thought¹². Within the phenomenal domain of consciousness, Descartes draws a parallel between the relations amongst ideas in the 'objective' sense, according to which they are said to be consistent or

¹² MacKenzie argues quite rightly that Descartes held to a componential analysis of idea-contents, though the syntax is never developed, and that 'objective' reality applies to the basic components (or simples). See MacKenzie. *Reason, Will and Sensation*. p. 260.

inconsistent, *and* the predicative attribution of properties to things (or features to ideas), according to which an idea is said to be adequate or inadequate.

The complex framework of ambiguous senses of "idea", "mode", and "reality" permits what is most distinctive about the Cartesian project -- the founding of evidential certainty entirely within the "subjective" world of the meditator. But so far we have only seen this in light of two-termed relations delimitable within the *cogitata qua cogitata*. After all, that they are disclosed as grounds for evidential certainty is the product of a specific act-idea the setting forth of the *cogito*.

This is not the whole story, however. For representation... is not merely a two-termed relation between a mental state and an object of thought, with a thinker attached, as it were, by a different relation to the mental state. Representation is rather a three-termed relation with the thinker as one of its terms. The thinker's (or the mind's) role in representation itself is just as essential as that of the representing state, and its link to the represented object is no less intimate and direct. The mind, or myself, Descartes says, is what the objects of my thoughts are represented *to*. My mental acts serve to represent things, but they represent them *to me*.¹³

Given Chappell's interim conclusion, quoted before, and his explicit reference here to the third term in what can only be described as the Cartesian *intentionality* of consciousness, it is odd that Chappell never draws attention to the parallel with a *phenomenological* analysis of this same theme. It seems odd especially since this is virtually the same observation which Husserl makes with regard to the same point of departure in Descartes:

Accordingly we have, in the Cartesian manner of speaking, the three headings, *ego - cogito - cogitata*: the ego-pole (and what is peculiar to its identity), the subjective, as appearance tied together synthetically, and the object-poles....[These are] different aspects of the general notion of intentionality: direction towards something, appearance of something, and something (an objective something) as the unity in its appearances toward which the intention of the ego-pole, through these appearances is directed. Although these headings are inseparable from one another, one must pursue them one at a time and in an order *opposite* to that suggested by the Cartesian approach. [Crisis.171-2]

¹³ Chappell, *op. cit.* p. 191; on the three-termed relation, see also C M. 65-7.

It is not to our purpose here to clarify the oppositeness of this opposite path which Husserl takes from the Cartesian point of departure. But it is vital to make sense of Husserl's claim¹⁴ that a genuine notion of intentionality is to be found in Descartes' theory of ideas *without distorting the very terms and relations with which Descartes explicates consciousness*. One of the essential features of the intentionality of consciousness is that it *objectifies*, makes an 'object' of consciousness, whatever it is that it is turned towards. "The forms or corporeal impressions which must be in the brain for us to imagine anything *are not thoughts*; but when the mind imagines or *turns toward* those impressions, its operation is a thought." [CSM III.180] This turning-toward is the activity of the mind (in the broad sense) which embraces the specific act-character of thinking.

As to the fact that there can be nothing in the mind, insofar as it is a thinking thing, of which it is not aware, this seems to me to be self-evident. For there is nothing that we can understand to be in the mind, regarded in this way, that is not a thought or dependent on a thought. If it were not a thought or dependent on a thought it would not belong to the mind qua thinking thing; and we cannot have any thought of which we are not aware at the very moment that it is in us. [CSM II.171]

Consider the example which Descartes uses in his discussion of a perceived object and the idea which one has of it -- the sun in the sky [CSM II.27]. Let us interpolate another celestial object, the moon, in order to better draw out all the distinctions made thus far. The moon itself and the sun itself differ in a number of respects such that one can univocally pick out one and not the other. The differences between the two celestial bodies cannot alone account for the difference between my idea of the sun and my idea of the moon. It is not necessary that there even be some thing "out there" for me to have an idea, which qua idea can be distinguished from some other idea. My idea of a griffin is clearly distinct from my idea of a unicorn, but certainly not in virtue of the ideas being *about* two actual things "out there".

¹⁴ Alanen makes a solid case for an understanding of Cartesian ideas as always being presented against a background of other ideas, beliefs and attitudes in terms of which these ideas are interpreted. Sensations are not just given as such, but are identified only after reflection; this is "the outcome of a phenomenological reduction of a kind". *Reason, Will and Sensation*. p. 245.

It is also possible to have more than one idea-object of some thing, e.g. the sun seen by the naked eye and the astronomical construct, though they both pick out the same thing. How then can one claim to know that the sun or the moon exists and not the griffin? Not merely by resort to the fact that one can *see* the former and not the latter. "This seeing does not affect the mind except insofar as it is an idea.... Now the only reason why we can use this idea as a basis for the judgement that the sky exists is that every idea must have a really existing cause of its *objective* reality; and *in this case* we judge that the cause is the sky itself." [CSM II.117] But in other cases, the cause of the idea-object is not a thing "out there" -- this in no way diminishes its 'objective' reality as an immanent content of consciousness.

"In just this case" here serves to highlight that one cannot resolve the issue of the ontological status of the cause of an idea merely by inspecting the ideative content. One must in addition attend to the act-feature by means of which the idea is given as an 'object' of thought. "In just this case", one can *turn towards* the sun in the sky in a way in which one cannot turn towards a griffin. That we have different idea-objects of the sun in the sky and that we know that they are ideas of one and the same thing -- this knowledge cannot be the *result* of an appeal to some *resemblance* between the actual sun itself and my idea of it, for this is exactly what is called into question by the various stages of doubt.

We cannot have any knowledge of things except by the ideas we conceive of them; and consequently that we must not judge of them except in *accordance with those ideas*, and we must even think that whatever *conflicts* with these ideas is absolutely impossible and involves a contradiction.... I do not deny that there can be in the soul or the body many properties of which I have no idea; I deny only that there are any which are *inconsistent* with the ideas of them that I do have, including the idea that I have of their distinctness. [CSM III.202-3]

Internal consistency amongst one's ideas qua 'objects' of thought is one criterion by means of which some predicates (those items dependent on an 'object') can either be included or excluded in the intellectual grasping of a given idea: included when the idea is clear and distinct, excluded when the idea is obscure and confused. However, at this stage in the order of reasons, one cannot make further appeal to any *coherence* with respect to how (or if) the idea *corresponds* with an alleged thing itself. Before the

proof of God's infinitude and benevolence, it is not necessary to prove that the world could not be an illusion generated by a "malign demon". Given that the world's existence is bracketed by the highest level of doubt, it is only necessary to demonstrate that different operations of the intellect can be distinguished on the basis of the formal and eminent reality of their causes. It is this separability within the realm of the way things *seem to be* that permits determination of some predicates as inconsistent with others.

The idea-objects "chimera", "triangle", "piece of wax", etc., are not discriminable merely in terms of the properties which these 'objects' endorse, but must take account of the manner in which they are conceived. And that means the specific mode of cognition (the "class" of act-ideas perceiving, imagining, remembering) which is the sole contributive cause of their being perceptual ideas, imaginative ideas, etc. At this stage then, the correlation of cognitive modality and modalized content serves to exclude only adventitious ideas, those which are not innate or purely fictive. The intellective mode as a "class" of act-idea has its own formal and eminent reality: in the same sense, but not with the same origin that alleged things "out there" have. "Just as the objective mode of being belongs to ideas by their very nature, so the formal mode of being belongs to the causes of ideas... by their very nature." [CSM II.29] The various cognitive modes and their modalized contents are minimally separable by the "real" causal character of act-ideas qua acts.

If one views the Cartesian theory of certain knowledge from the point established by the Fifth Meditation in which clear and distinct understanding has been guaranteed by God's existence then one would not need to look *backward* to an earlier stage for any other condition-setting criteria. But this standpoint has not yet been secured in the Second or Third Meditation -- the formal and eminent reality of the ultimate cause hovers further down the meditator's path. One need look no further for the "real" causal character of the cognitive act than the first secured certainty -- the cogito. "This proposition, 'I am, I exist', is necessarily true whenever it is *put forward* by me or conceived in my mind". [CSM II.17] It is the "putting forward" which signifies the cognitive act, here the primordial cognitive act as the first certainty. It is an essential component in the unifying intentional consciousness which is directed towards that which is seized through the act in its signitive content -- thinking thing. "When the intellect *puts forward* something for affirmation or denial..." [CSM II.40], the will is inclined in such a way that one

does not feel determined by any external force. Numerous other instances underscore the active position-taking of the cogito. But by far the greatest interpretative effort has been expended on the *proposition* and that which it signifies, *res cogitans*, and far too little attention has been paid to the *putting forward* -- the topic for an analysis (Gueroult's "l'analyse des structures") of the act-features of Cartesian ideas.

Doubt is an Act of Positing as-if False

What is it about idea-objects which would incline the meditator, in a pre-theoretical manner, i.e. before the inception of universal doubt, to even consider that they might resemble things out there? Why even think of it as an issue of resemblance or correspondence as opposed to some other as yet undetermined relation? Wherein consists the 'objective' reality of the idea-object in virtue of which other ideas are consistent or inconsistent? Descartes has rejected "sensible species" and other physical-analogue models for the transmission of sensual and perceptual data. My idea of a tree is not itself green, leafy, and branching; the "at least as much" reality which the idea-object contains has an *as-if* (quasi) character. "There can be no ideas which are not *as it were* [quasi] of things; if it is true that cold is nothing but the absence of heat, the idea which represents it to me *as* something real and positive deserves to be called false." [CSM II.30] But if the idea-object represents something as if it were real and positive than it has this minimal objective reality which can then serve to indicate some formal or eminent cause. "Every clear and distinct perception is undoubtedly something (real and positive) and hence cannot come from nothing." [CSM II.43]

Whether this representing takes the form of a proposition, a judgement, a desire, etc. -- and thus implicates divergent cognitive modes -- is an issue for the conceptual analysis of the idea-objects. But irrespective of their modes, all of these are positings, specifically positings of an *as-if* character.¹⁵ That is, holding in the "mind's eye" this idea as if it were something real and true, or as if it were *unreal and false*.

¹⁵ "Abstaining from acceptance of its being... we shift the actual perception into the realm of non-actualities, *the realm of the as-if*, which supplies us with 'pure' possibilities, pure of everything that restricts to this fact or to any fact whatsoever." C M. 70. See also E. Marbach, *Mental Representation and Consciousness*. Kluwer Academic, 1993. p. 61.

To be directed towards an idea-object as if it were unreal and false is to *doubt* that 'object', to find that idea (or all ideas!) doubtful. But doubting is not thinking about a divergent *kind* of 'object'. It is not just being directed towards the contents of one's thoughts of which *some* are unreal and false -- "doubting [is] thinking in a *certain kind of way*". [CSM II.415] What exactly indicates doubting as a specific mode, in the broad sense, of thinking? One must turn to the faculty of willing and its active character, in the narrow sense, for an answer.

In addition to thinking *per se*, Descartes distinguishes other diverse modes: "Thus when I will, or am afraid, or affirm, or deny, there is always a particular thing which I take as the *object* of my thought, but my thought includes *something more* than the likeness of that thing." [CSM II.26] What is this "something more" included (i.e. in the way that act-ideas contain 'objects') in the 'object' of my thought (i.e. the 'objective' reality of an idea-object) that it is not to be found merely in the objective reality of the thought *qua* thought? The "something more" is to make the positing act-idea directed towards the as-if idea-object into an idea-object itself and then to modalize this in a certain manner.¹⁶ The idea-object of any given thought is not modalized in the same manner when it is an act of will as when it is an act of desire. For the purpose of this analysis, the surplus in *doubting* is to regard the act-idea of a thought as itself an idea-object which is then considered as if it were unreal and false. It is to step back, so to speak, in the putting forward of the quasi-reality of an idea (or all ideas) and their hypothetical subtraction, in which one adopts a quasi-positional stance on the positing regard itself. This is the essence of the Cartesian *epoche*, the "bracketing" of the world achieved at the highest level of universal doubt.

Descartes explicitly introduces doubt with the as-if qualification: "Anything which admits of the slightest doubt I will set aside just *as if* I had found it to be wholly false." [CSM II.16] And in the Fourth Meditation: "The mere fact that I found that all my previous beliefs were in some sense open to doubt was enough to turn my absolutely confident belief in their truth into the *supposition* that they were wholly false." [CSM II.41] A perfect choice of terms, for what is supposition but *sub-posito*, a modalized form of

¹⁶ "Instead of becoming lost in the performance of acts built intricately on one another, and instead of (as it were) naively positing the existence of the 'objects' intended in their sense we must rather practice reflection, i.e. make these acts themselves, and their immanent meaning-content, our 'object'." L I. 254-5.

positing. In his critics' intractable wrangling with the depth and scope of methodical doubt, this is one complaint which he constantly has to rectify: that he has not taken the world *to be* false or not to exist, but has considered the world and worldly sense data *as if* it were false. One path then to an understanding of what methodical doubt means as a supposition is to eschew analysis and interpretation of what doubt is about, what is taken as doubtful, and to turn our attention instead to the as-if positing as revealed in the act-features specific to doubt. Our analysis of the theory of ideas has hopefully made clear that a comprehensive understanding of methodical doubt is not only to be found in what can be doubted (since anything can be doubted), or under what circumstances some thing is doubtful (since these can be varied at will), but in the specific modalized features, which we shall call "phases", of the act of doubting.

The well-known stages of methodical doubt are initiated by problematics, skeptical queries directed towards that which the meditator has taken to be genuine knowledge. First, that my sensory knowledge of external objects sometimes deceives me impels me to consider all such knowledge *as if* it were false and its objects unreal. Second, that it is sometimes the case (while dreaming) that what appears to me may have an unknown, undetermined relation to an external world impels me to consider any purported relation to that world *as if* it were false and its relational connection as unreal. Third, that it is possible that it is always the case that beliefs about the world, which includes my own body and its purported relation to other bodies, may be the result of systematic deception impels me to consider the supposition that there is an external world *as if* it were false and its world unreal.¹⁷

The little-studied phases of methodical doubt are the act-features which characterize the considering as-if, treating as-if, whatever comes within the scope of its positional regard. As such, these phases are essential features of doubt alone and cannot be considered as act-features of the general activity of consciousness, for which other position-takings (desiring, fearing, etc.) will have a divergent "class" of act-ideas pertinent to the manner in which the respective "class" of idea-objects is cognized. With respect

¹⁷ This highly condensed synopsis of the stages of doubt endorses the analysis given by E. M. Curley. *Descartes Against the Skeptics*. pp. 116-24.

to the intrinsic act-features of methodical doubt considered as a "class" of act-ideas, we can discriminate six distinct phases.

1. *Abandoning prejudices.*
2. *Detachment from the senses.*
3. *Abstention from judgement.*
4. *Clear and distinct seeing.*
5. *An act of will.*
6. *Attentional regard.*

In order to adumbrate the internal relations and sequences amongst these phases, it will be necessary to examine a number of Cartesian texts and extract those remarks directed explicitly toward ideas in their "material"/active sense. It may then be possible to provide an answer to Berger's question as to "how the soul possesses its own ideas...the nature of the act in which the I grasps its own ideas", at least with regard to *ideas which are taken as doubtful*.

1. *Abandoning prejudices.*

This theme is present in Descartes' thinking from the earliest period, i.e. from his first confrontation with the problematic of initiating an entirely *radical* refounding of science. The dual sense of "radical" can be seen in the repeated uses of the phrase "uprooting from my mind" all unexamined opinions; and its complement, "starting again from the root", the point from which any source springs. The radicality of this reevaluation of the way in which philosophy is done and its place in the system of the sciences is emblemized in the "tree of sciences" image: "The roots are metaphysics, the trunk is physics, and the branches... medicine, mechanics and morals." [CSM I.186] This image¹⁸ is inherent in the metaphor of science's edifice: to demolish everything and start again from the beginning is to abandon all previously achieved knowings (*scientiae*). And this means to bring them to light as what they are if

¹⁸ For which, see Desmond Clarke, "Descartes' Philosophy of Science". in *Cambridge Companion to Descartes*. John Cottingham, Editor. Cambridge, 1992. pp. 271-5.

dirempted of a radical self-grounding -- *prejudices*, that is, judgements made before the establishment of a coherent standard of what would count as evidence upon which any judgement could be based.

As a theme it is found throughout Descartes' principal works: from the *Rules*, "We reject all such merely probable cognition" [CSM I.10]; from the *Discourse*, "the simple resolution to abandon all the opinions one has hitherto accepted"; "I had to uproot from my mind all the wrong opinions I had previously accepted." [CSM I.118,22]. From the *Meditations*, "These proofs... require a mind which is completely free from preconceived opinions and which can easily detach itself from involvement with the senses." [CSM II.5]; and from the *Principles*, "There are many preconceived opinions that keep us from knowledge of the truth." [CSM I.193] According to Part One of the *Discourse* [CSM I.113-6], these prejudices and pre-conceived opinions are acquired in childhood and adolescence, that is, through parents, school, and books; treating examples from romances and fables as ethical precepts; investigating a scientific topic in an improper manner; or even the uncritical acceptance of skepticism as the answer to allegedly insoluble philosophical problems.

On the one hand, the overcoming of prejudices is the *purpose* for which a universal science strives, that is, in order to found a comprehensive system of certain knowledge, free from the merely probable, the dubious and the confused. On the other hand, abandoning prejudices is a *pre-condition* for bringing methodical doubt into play. One particular scholastic precept, that nothing is in the intellect which was not in the senses, is enough to make doubt seem specious. It is sometimes unclear whether Descartes arrives at a clear and distinct idea of methodical doubt as a principle after freeing himself from prejudices or whether these prejudices are exposed as such after the operation of methodical doubt. "The usefulness of such extensive doubt is not apparent at first sight, its greatest benefit lies in freeing us from all our preconceived opinions and providing the easiest route by which the mind may be led away from the senses." [CSM II.9]

In resolving the issue of how it is that one could understand the efficacy of methodical doubt in vitiating prejudices, he has recourse to the "natural light" which God has bestowed on human minds: "Since God has given each of us a [natural] light to distinguish truth from falsehood, I should not have thought myself obliged to rest content with the opinions of others." [CSM I.124] "Thus I gradually freed

myself from many errors which may obscure our natural light and make us less capable of heeding reason." [CSM I.116] So in this sense, the natural light is that "divine spark" which is capable both of exposing our beliefs and opinions as ill-founded *and* is requisite for the procedural decision to abandon those beliefs and search for more certain knowledge. "Someone who is stuffed full of opinions and taken up with any number of preconceptions finds it difficult to submit himself exclusively to the natural light." [CSM II.417]

Abandoning prejudices, in addition to its function as a thematic concern for a radical first philosophy, can itself be taken as a specific positional attitude within the disclosure of the ground made ready for building again. As such, as a specific cognitive *act*, it is the first order of business in the *Meditations*, i.e. the primordial act in the chain of reasons which leads to certain knowledge. After setting the stage and resolving on this course "once in his life", in the second paragraph, he states that it is not necessary, not even feasible, to show that all his opinions are false. He considers that he should hold back his assent from any opinions which are not completely certain just *as if* they were false. "So for the *purpose* of rejecting all my opinions, it will be enough if I find in each of them at least some reason for doubt."

2. *Detachment from the senses.*

If prejudices are unfounded beliefs based on spurious evidence ["I will *suppose* then, that everything I see is *spurious*", CSM II.16], the second phase in methodical doubt requires detachment from the senses as the most likely source of sensory illusions and deceptions. In the *Discourse*, this second phase is not clearly demarcated from the abandonment of prejudices, though it is tacitly included in the summary of his search for truth at the start of Part Four [CSM I.127]. His outline includes this chain of reasons: a) because our senses sometimes deceive us, to suppose that nothing really is such as they lead us to imagine; b) since it is possible to make mistakes in reasoning, to no longer accept as sound arguments previously taken as demonstrative proofs; c) since thoughts similar to those experienced while awake occur during dreams, without any of them being true, to pretend that all such thoughts are no more true than the illusions of my dreams.

Detachment from the senses is explicitly indicated as a distinct phase and subsequent to freeing from prejudices in the *Meditations* and the *Principles*. "These proofs... require a mind which is completely free from preconceived opinions and which can easily detach itself from involvement with the senses." [CSM II.5] "... Freeing us from all our preconceived opinions and providing the easiest route by which the mind may be lead away from the senses." [CSM II.9] "If I were not overwhelmed by preconceived opinions and if the images of things perceived by the senses did not besiege my thought on every side..." [CSM II.47] And in regard to arguments for the existence of God. "they are clearer in themselves than any of the demonstrations of geometers; in my view, they are obscure only to those who cannot withdraw their minds from their senses." [CSM III.53]

Just as in the case of abandoning prejudices, so here also detaching from the senses has both a ground and a purpose. The grounds upon which it is requisite to detach are that sensory perceptions may be deceptive and if there is the least cause for doubt in that domain, one should withdraw from the domain altogether. The purpose of detaching is to place oneself in a position where that which is not doubtful may make itself apparent. It is important to understand these two conjoint phrases as a pretence or fiction which Descartes employs in an as-if manner, a manner similar to that in which 20th C. analytic philosophers employ thought experiments. He will "deceive himself, by *pretending* for a time that these former opinions are utterly false and imaginary". [CSM II.15] Indeed the *Discourse* is introduced as "a history or fable" [CSM I.112]; and in the elaboration of cognitions from the most simple to the most complex, "by *supposing* some order even among objects that have no natural order of precedence." [CSM I.120] The procedure in the Second Meditation involves "a rejection of the images of bodies... [as] a fiction of the mind." [CSM II.93] It is necessary to detach the mind from the senses, because in the later dualistic conception, the body and the mind are so intermingled that the nature and extent of mind is obscured in an unknown manner. One would be unable to clearly and distinctly grasp the nature of the mind without first having divorced one self from sensory influences.

Let us re-iterate that one of the preconceived opinions which are being rejected is that there is nothing in the intellect which was not first in the senses. To discover whether this opinion has the least ground for doubt should not lead one to dispute this opinion by *counter-posing* another opinion (the

skeptical technique of *isosthenia* which Descartes also rejects -- another prejudice!). Rather it is to *suppose* that the senses are simply not accessible for enquiry. What remains then in the intellect? In regard to the hypothesis implicit in this conditional statement, is the antecedent false if the consequent is denied?

In fact, the opinions and beliefs which he has rejected all have this epistemic characteristic: "Whatever I have up till now accepted as most true I have acquired either *from the senses or through the senses....*". There is no point in arguing against this, employing other demonstrations which are equally liable to this weakness; rather the next link *activates* another phase of the pretence which is dramatically brought into force in the opening lines of the Third Meditation: "I will now shut my eyes, stop my ears, and *withdraw all my senses*. I will eliminate from my thoughts all images of bodily things.... I will regard [them] as vacuous, false and worthless." [CSM II.24] What is being underscored here are not just the contents of thought (idea-objects) undergoing this exercise, but the positional attitude towards whatever enters consciousness; and this attitude is decisively that of an as-if positing.

3. Abstention from Judgement.

It is subsequent to the dual withdrawal from prejudices and sensory pressures, and consequent on the state of mind which results from this, that Descartes finds himself in a position to abstain from affirming or denying those things (if any) which remain. Attaining this position makes it both possible to neither affirm nor deny that which is presented to one's positing regard *and* compels one to carry out this abstention as the only feasible procedure for achieving certainty. This third phase is clearly marked out as such in the *Meditations* and the *Principles*, but unlike the dual withdrawal above, abstention is not made explicit in the *Rules* and the *Discourse*. This is largely due to the fact that the highest stage of doubt, which suspends the purported existence of the world, depends on the unique epistemic power of the malign demon hypothesis.

In his synopsis in Part Four of the *Discourse* of the chain of reasons which lead to methodical doubt as a procedure, abstention does not figure as a phase in itself. Instead, after rejecting prejudices, impugning sensory perceptions, and then finding his dreams liable to the illusion of their wakeful realities, he will *pretend* that all other position-takings are equally prone to error -- and thus to consider

them as if they were false. His resolve at this point is to accept nothing as true and real which is not conceived clearly and distinctly, and *this* truth, about the acceptance of this criterion, is assured by the perfection and beneficence of God. [CSM I.130] There is a considerable difference between assuming something to be false, insofar as it does not attain to clear and distinct intuition, *and* suspending or bracketing (in the phenomenal epoche) the truth or falseness of something in order for such intuition to be brought into play. Two crucial points about the elision of abstention in the *Discourse*: one is that the most pervasive and corrosive stage of doubt awaits the entrance of the malign demon; the other is that here mathematical truths are exempt from this pretence, whereas in the *Meditations*, they too succumb to the contagion of hyperbolic doubt.¹⁹

After recalling the time "some years ago" when he composed the *Discourse*, in the next paragraph he states that "Reason *now* leads me to think that I should *hold back* my assent from opinions which are not completely certain and indubitable just as carefully as I do from those which are patently false." [CSM II.12; emphasis added] And later, prior to the "persuasive reason" which clear and distinct intuition will provide, "I am indifferent as to whether I should assert or deny either alternative, or indeed refrain from making any judgement on the matter." [CSM II.41] And this achievement of an abstentive position is also assured by our God-given freedom of will: "It is surely no imperfection in God that he has given me the freedom to assent or not to assent in those cases where he did not endow my intellect with a clear and distinct perception." [CSM II.42]

This conditional notion of freedom is picked up again in the *Principles*: "We have free will enabling us to withhold our assent in doubtful matters and hence avoid error." [CSM I.194] Husserl also will underline this volitional condition within the transition from the natural standpoint to that of the first reduction: "The attempt to doubt universally belongs to the realm of our perfect freedom: we can attempt to doubt anything whatever, no matter how firmly convinced of it.... This changing of value is a matter in which we are perfectly free and it stands over against all cognitive position-takings." [Ideas I.58-9] This

¹⁹ Both Descartes and Husserl refer to the unchecked spread of hyperbolic doubt as "contagious" or "infectious" processes; see the "rotten apples" image in the Sixth Replies, CSM II. 324.

fullest or perfect freedom as the fundamental condition for withholding assent and denial is to be emphatically distinguished from the "act of will" which is exercised on the basis of clear and distinct seeing (see below sec. 5).

In contrast to the many standard skeptical techniques which Descartes rejects, there is one which he adopts: the *epoche* or suspension. This withholding of judgement was, of course, the procedural terminus for the skeptics, though the practical result of acknowledging the validity of the *epoche* was tranquillity or quietude. Descartes also placed great store in achieving peace of mind as the highest stage of wisdom [CSM I.149], but in his case this was the fortunate consequence of having attained certainty in science. Abstention is the *hinge* in a comparative analysis of Cartesian methodical doubt and in the phenomenological reduction. Within a phenomenological description of the Cartesian path it is here that Husserl parts company with Descartes and thus this *epoche* constitutes a new starting point. Because where Descartes seeks to secure the closure of abstention by recourse to God, Husserl maintains the *epoche* in order to disclose the structures of consciousness.²⁰

Abstention may seem to be a rather peculiar form of cognitive *activity*, if anything it seems to signify a lack of activity in the way that abandoning and detaching do not. But this is to take the meaning of this cognitive act in the volitional sense which none of the other phases denote. Abstention is indeed a specific positional regard, almost always qualified in terms of affirming or denying a judgement, and hence taken with respect to that which is the idea-object of an act of will. Abstention, as that which discloses or brings forward the 'objects' of thought, and the act of will which follows are concurrent causes (or phases) in knowing something to be true or false. "Now all that the intellect does is to enable me to perceive (Fr.: without affirming or denying anything) the ideas which are subjects for possible judgements." [CSM II.39] Adhering to an abstentive posture prevents one from inclining towards affirmation or denial as the result of some "blind impulse" -- blind in that it is not open to clear and

²⁰ "If I abstained ... and still abstain from every believing involved in or founded on sensuous experiencing, so that the being of the experienced world would remain unaccepted by me, still this abstaining is what it is; and it exists, together with the whole stream of my experiencing life. Moreover, this life is continually there *for me*." C M. 19.

distinct seeing -- which would bestow no greater epistemic weight on an option than if it were the product of pure chance.

4. *Clear and distinct seeing.*

Once one has acknowledged prejudices as pre-judgements made without grounded evidence; detached oneself from the senses as the probable source for the spuriousness of such evidence; and abstained from assenting to or denying any other judgements -- only then can clear and distinct seeing come into play. It is precisely this act-phase which will permit assent or denial, not according to blind impulse which would only counterpose another equal-weighted judgement, but according to a criterion which discriminates only one possible idea-object as the adequate grasping of a specific act-idea. In an exemplary manner, this is what happens in the "piece of wax" episode in the Second Meditation. The essence of the wax is adequately seized in a clear and distinct seeing of the intellect alone.

The concept of clear and distinct seeing has a thematic continuity throughout Descartes' writings. It appears as early as Rule Three of the *Rules* in the guise of *intuition*. "of a clear and attentive mind, which is so easy and distinct that there can be no room for doubt about what we are understanding... [i.e.] intuition is the indubitable conception of a clear and attentive mind which proceeds solely from the light of reason." [CSM I.14] Note that even here, in its earliest formulation, this cognitive operation explicitly excludes the least ground for doubt and includes a reference to attention (see phase 6, below). This is not meant to elide the fact that the *Rules'* intuition is a less mature, less complex operation than the pure intellectual seeing of the *Meditations*, yet it already contains some of the crucial conceptual features of the latter version.

Clarity and distinctness appear in the *Discourse* immediately after the summary of the chain of reasons at the start of Part Four mentioned above. "I decided that I could take it as a general rule that the things we conceive very clearly and very distinctly are all true; only there is some difficulty in recognizing which are the things that we distinctly conceive." [CSM I.127] Prior to that it forms the key feature of the first of his practical "maxims". [CSM I.120] Although this may be enough for "moral" or *practical* certainty, it is not sufficient by itself to insure *metaphysical* certainty, i.e. that it is impossible that there

are any adequate grounds which would implicate minimal doubt. Thus this rule about conceiving clearly and distinctly is itself only secured by the perfection and infinitude of God.

This phase is set forth in "geometrical fashion" in the Postulates appended to the Second Replies, where Descartes asks the reader to review all the examples of clear and distinct seeing in the *Meditations*: "I ask them to conclude that it is quite irrational to cast doubt on the clear and distinct perceptions of the pure intellect merely because of preconceived opinions based on the senses, or because of mere hypotheses which contain an element of the unknown." [CSM II.116] Each of the subordinate clauses excludes any "infection" of minimal doubt; the one from the fact that prejudices and sense-based beliefs have been neutralized by the first two phases; the second due to the fact that any hypothesis, i.e. via the skeptical trope of inserting a new start during a regress. is still suspended through abstention. These paired terms receive a precise "synthetic" exposition in *Principles* I. 45:

A perception which can serve as the basis for a certain and indubitable judgement needs to be not merely clear but also distinct. I call a perception 'clear' when it is *present* and accessible to the *attentive* mind -- just as we say that we see something clearly when it is present to the eye's gaze and stimulates it with a sufficient degree of strength and accessibility. I call a perception 'distinct' if, as well as being clear, it is so sharply *separated* from all other perceptions that it *contains* within itself only what is clear. [CSM I.207-8]

Perception as the exemplary mode of the pure intellect is here being compared to sensory perception in order to better draw out the sense of clarity and distinctness. As other contexts make evident, this operation is itself clarified and made distinct in the perception of simple natures. That, for instance, in the sensory perception of a malleable, textured, coloured piece of wax, any one concrete simple is present to (i.e. an idea-object) the visual regard in such a manner (i.e. according to its own cognitive mode) as to call forth in terms of the formal reality of its cause this perceptual simple. Furthermore, when no other concrete simple is present with this idea-object then the act-idea of the visual regard *contains* (in the way all acts contain contents) no more than just this idea-object.

Obscurity and confusion are the opposites of clarity and distinctness and to emphasize the act-feature of intellectual regard, i.e. the advertence of the attentive mind, these act-ideas can themselves be

made the content of a further reflective regard. The significance of this passage below about the *transparency* of reflection cannot be over-estimated.

We must distinguish between the *subject-matter*, or the thing itself which we assent to, and the *formal reason* which induces the will to give its assent [phase 5]: it is only in respect of the reason that *transparent* clarity is required. As for the subject-matter, no one has ever denied that it may be obscure -- indeed obscurity itself. When I judge that obscurity must be removed from our conceptions to enable us to assent to them without any danger of going wrong, this *very obscurity is the subject concerning which I form a clear judgement*. It should also be noted that the transparency which can induce our will to give its assent is of two kinds: the first comes from the natural light, while the second comes from divine grace. [CSM II.105]

Now Descartes is the first to admit that issues of divine grace are best left to theologians and this is not one of the subject matters to which his attention as a philosopher is directed. But it is certainly directed towards the natural light which itself is God-given and which illumines the simple fact that what secures clarity and distinctness in intellective seeing as the criteria for certainty is god's infinitude and perfection. Nevertheless, the choice of terms here cannot be ignored: the formal reason (act-idea) requires *transparency* with respect to its subject-matter (idea-object) which can itself be either clear and distinct or confused and obscure. One can adopt a position (in the purely ideative sense, of course) in which one can clearly and distinctly *see through* the clear and distinct (or confused and obscure) seeing of any given idea-object as the effect in virtue of which the idea contains just this 'objective' reality.

But the formal reality of this operant condition which renders transparency perspicacious is not to be found within the immanent domain of consciousness: one must have recourse to something beyond this. Or so at least Descartes' scheme demands.

Since there is no direct consciousness of anything except what is enclosed within immanence, a strategy must be found for explaining the possibility of ever reaching the object of true cognition. That strategy is to infer one's way out of the prison of subjective appearances by means of a transcendental guarantee [God], who himself must be verified by means of a proof. With this guarantee in hand, the tacit judgement that ideas really do correspond to objects can be saved,

with the qualification that such judgements are justified only within the limits of clear and distinct perceptions.²¹

5. Act of will.

We return here to the strict sense of act described in the previous context where ambiguity in the term 'idea' was first introduced. In the broad sense, an act-feature indicates the specific positing regard in thought, i.e. 'idea' in the material sense, in virtue of which any mode of thinking may be characterized as having both a class of act-ideas and a correlative class of idea-objects. But *Principles* I. 32 also distinguishes volition as another primary mode, along with the intellect, namely the operation of the will which comprises: desire, aversion, assertion, denial and doubt [CSM I.204]. Section I. 33 endorses the notion of abstention as long as what is perceived, and hence what is a subject-matter for judgement, is not resolved in a clear and distinct manner. Section I. 34 clearly indicates that an act of will is genetically posterior to clear and distinct seeing which has been activated with regard to all idea-objects which are held in suspense. "In order to make a judgement, the intellect is of course required.... But the will is also required so that, once something is perceived in some [=certain] manner, our assent may then be given." [ibid] And section I. 43 builds in the notion of a divine guarantee of clear and distinct seeing according to which an act of will affirms just that perception which is real and positive and whose judgement is true. "It is certain ... that we will never mistake the false for the true provided we give our assent only to what we clearly and distinctly perceive. I say that this is certain because God is not a deceiver, and so the faculty of perception which he has given us cannot incline to falsehood; and the same goes for the faculty of assent [=volition], provided its scope is limited to what is clearly perceived." [CSM I.207]

So much for the synthetic presentation, according to the order of topics, of the faculty of volition. Where does it appear in the order of reasons as presented in the *Meditations*? If our analyses of the phases of methodical doubt are correct then this phase would not form a link in the chain of reasons until the previous phases have been activated. Indeed this has been true of phase three (abstention) and phase four

²¹ John Burkey. "Descartes, Skepticism, and Husserl's Hermeneutic Practice". *Husserl Studies*. vol. 7 (1990). p. 20.

(clear and distinct seeing). The Third Meditation opens with a taxonomy of those things which the meditator knows at that point to be true of himself as a thinking thing: "that is, a thing that doubts, affirms, denies, understands a few things, is ignorant of many things, *is willing, is unwilling*, and also which imagines and has sensory perceptions." [CSM II.24]

The meaning of some of these features of himself the meditator has already discovered; but nothing so far about the meaning of willing and unwilling. The Third Meditation then proceeds to endorse the procedure of abstention, to illumine the criterion of clarity and distinctness, to establish the difference between formal and objective reality of an idea, and then to demonstrate the existence of God as surety for the criterion. Only *then* in the Fourth Meditation does volition come into its own, as the second of two concurrent causes (or principles), the first of which was the intellect, for the truth of judgements. "The will consists simply in our ability to do or not to do something (that is, to affirm or deny, to pursue or avoid); or rather, it consists simply in the fact that when the intellect puts forward something ... our inclinations are such that we do not feel that we are determined by any external force." [CSM II.40] In other words, forces or causes which are external to the purely immanent data of consciousness, such as "blind impulse", "prejudices", etc. which have been eliminated by the successive phases of doubt. It is however essential that it is always *possible* for one to be deceived or misled and hence to incline towards some thing for no good reason. Since human beings are imperfect and limited in their understanding, the scope of the will, i.e. that which can be considered as open to assent or denial, is always greater than the scope of the intellect, i.e. that which is presented in a clear and distinct manner as only part of the range of all possible idea-objects. Insofar as one is not inclined towards something within these internal constraints, one is merely *indifferent*, "the lowest grade of freedom". But in actively affirming that which is certain, pursuing that which is good, etc. one exercises fully human freedom. The sequence of this linkage is made quite explicit in the next passage: "A great light in the intellect was *followed* by a great inclination in the will"; and further, "it is clear by the natural light that the perception of the intellect should always *precede* the determination of the will." [CSM II.41]

6. *Attentional Regard*

The concept of attention, like that of act, thinking and mode, has both a broad sense in which it appears in a variety of contexts in Descartes' works, and a strict sense in which it is a definite phase in methodical doubt. In the broad sense, attention has the straight-forward connotation of mental effort, studied focus on a theme; it is what Descartes calls for on the part of the reader of the *Meditations*. In the strict sense, as the final phase in the carrying through of that which has been affirmed as clear and distinct, it signifies the summary recapitulation of all the previous phases and what they have secured in order that this intricate process does not have to be carried out again and again.

Like the abandonment of prejudices, but unlike abstention and an act of will, attention in the broad sense appears in numerous places throughout the *Rules*. Attention is a positive, steadfast mental regard which goes hand in hand with intuition, "the indubitable conception of a clear and *attentive* mind which proceeds solely from the light of reason". [CSM I.14] In conjunction with deduction, these two operations comprise a *method*, that is, "reliable rules which are easy to apply, and such that if one follows them exactly, one will never take what is false to be true or fruitlessly expend one's *mental effort*." [CSM I.16] Attention as devoting one's mental efforts takes the form of concentration in the summary of Rule Five: "The whole method consists entirely in the ordering and arranging of the objects on which we must concentrate our mind's eye if we are to discover some truth." [CSM I.20] However, this focal regard takes on a procedural character in Rule Seven where all the component intuitions in a deduction must be surveyed in a continuous sweep of thought. This is taken up again in the summary of Rule Eleven, which thus gives an inkling of the sort of cognition required in order to understand the whole of the *Meditations* as a complex of chains of reasons.

This broad sense of attention appears in numerous places in the *Meditations*, often phrased in a privative manner, that is, in terms of a mental condition when attention has been dissipated. "If one concentrates carefully, all this is quite evident by the natural light. But when I relax my concentration..."; "I am aware of a certain weakness in me, in that I am unable to keep my attention fixed on one and the same item of knowledge at all times; but by attentive and repeated meditation I am nevertheless able to make myself remember it." [CSM II.32, 43] Devoting one's mental efforts to the *Meditations* as cognitive exercises is exhausting, even for the most unprejudiced, sense-detached reader. The author cautions those

who want to follow him on this path to "a new world" to read one Meditation each day and then to reread them with an enhanced focal regard, paying attention in a new way to what is accomplished by adhering to an order of reasons. This destination can only be reached in this manner, but if one should fall by the wayside, an appeal to the footholds already secured will put one back on the right track.

Husserl also would concede that these procedures require the utmost attentional effort. Holding the bracketed world in front of one's thematic regard through the maintenance of an abstentive posture demands "strenuous labours". In the transition from the natural attitude, the proper procedure for the reduction would in some sense guarantee that it would hold in place throughout further analyses. "I can let my mind wander away from [these things] in a knowing of them which involves no conceptual thinking and which changes into a clear intuiting only with the advertence of attention." [Ideas I.52] This is highly reminiscent of Descartes' comment in a closing statement at the end of Part One of the *Principles*: "Our mind is unable to keep its attention on things without some degree of difficulty and fatigue; and it is hardest of all for it to attend to what is not present to the senses or even to the imagination." [CSM I.220]

For Descartes, the carrying through of the procedure of methodical doubt is not to be abandoned after one had arrived at the principle of clear and distinct seeing as the cognition of certain truths, nor is it essential to repeat all of the steps in order to return to the indubitable fulcral point of the cogito. Having attained attentional regard as the final phase, all of the previous steps are retained within it. In some sense, all of the prior links in the chain of reasons, each of which has been achieved stepwise through diverse phases, are recapitulated in the attentive holding-in-regard. This synoptic quality of attention is of crucial importance for Descartes to escape Arnauld's charge of circularity against the second proof of God's existence. "We are sure that God exists because we *attend* to the arguments which prove this; but subsequently it is enough for us to *remember* that we perceived something clearly in order for us to be certain that it is true." [CSM II.171] It is one of the characteristics of humans as limited and imperfect that one cannot always be attending to an intuitive truth, and hence it is a contingent fact that one must have recourse to the memory of an attended truth. But it is necessary for our knowledge of the truth of what is memorially retained, that what has been attended to in the stepwise clarification of our perceptions

was originally perceived as true due to entirely a priori conditions -- and those are: the sequence of phases in the resolution of methodical doubt.

In a letter to Mesland of 1644, Descartes synthesizes the last four phases of doubt in a manner which was perhaps not feasible in the context of a specific meditation. One would have to acknowledge the tacit assumption of the first two conjoint phases, abandoning prejudices and detaching from the senses, but these can be taken as background conditions.

I agree with you when you say that we can *suspend our judgement*; but I tried to explain in what manner this can be done. For it seems to me certain that a *great light in the intellect* is followed by a *great inclination in the will*; so that if we see *very clearly* that a thing is good for us, it is very difficult... to stop the *course of our desire*. But the nature of the soul is such that it hardly *attends* for more than a moment to a single thing.... Since we cannot always attend perfectly to what we ought to do, it is a good action to pay *attention* and thus ensure that our will follows so promptly the light of our understanding that there is no longer any indifference at all. [CSM III.233-4]

The metaphorical sense of "light" in the crucial concept of natural or divine light is particularly evident in the way in which attention is a matter of focal regard. At each stage in the stepwise achievement of another link in the argument, the meditator is in danger of straying from the path, of succumbing to the darkness and obscurity which lies on all sides and behind. "But this is an arduous undertaking, and a kind of laziness brings me back to normal life....In the same way, I happily slide back into my old opinions and dread being shaken out of them... and that I shall have to toil *not in the light*, but amid the inextricable *darkness* of the problems I have now raised." [CSM II.15]²² Thus also for that which is held within this attentional regard, lest it slip away from being clearly and distinctly marked out as the object of intuition. It is with very similar sentiments that Husserl describes this concept: "Attention is usually compared to a spot-light. The object of attention, in the specific sense, lies in the cone of more or

²² "This reflection, like all attentiveness, is no more than the concentration of the whole capacity of intelligence on a single point that then becomes the sharp focus of light, the other points ceasing, or almost ceasing, to receive the light, and finding themselves rejected in the night, meaning in a void of knowledge." Martial Gueroult. *op.cit.*: vol. I, p. 57.

less *bright light*; but it can also move into the penumbra and into the *completely dark region*. Though the metaphor is far from adequate to differentiate all the modes which can be fixed thus...." [Ideas I.224]

Excursus on attention

In addition to its relevance for the phenomenological conception of methodical doubt, Husserl also discusses previous thinkers who have thematized attention as one of the precedents for elucidating that most fundamental feature towards which the *epoche* is directed: the intentionality of consciousness. In Husserl's peculiar gloss of "descriptive psychology" as phenomenology, he makes explicit reference to attention as a ground-breaking theme for an understanding and predelineation of intentionality. "Not even the essential connection between attention and intentionality has ever, to my knowledge, been emphasized before." Descartes definitely did not *emphasize* attention but he did consider it separately from other modes of cognition. "What is in question here concerns the radically first beginning of the theory of attention and that the further investigation must be conducted within the limits of intentionality and moreover, not forthwith as an empirical, but first of all as an eidetical investigation." [Ideas I.226]

Pierre Thevanex, in his seminal article on Descartes and Husserl, arrives at a remarkable parallel in these conceptions by consideration of the central motif of the two thinkers' respective epoches. "If Descartes closes his eyes and ears [etc.]... it is in order to render the interiorization or the meditative self-communion of consciousness possible, this concentration which is *attention*. Husserl's epoché, on the contrary, makes the sense of the world appear and discloses the essential structure of phenomenological consciousness which is *intention*."²³

However, Gueroult quite rightly objects to Thevanex' interpretation of attention as the *essential* structure of the self, since it is no more than a phasal mode of methodical doubt; that is, essential to the elaboration of doubting as the path to certainty, but not to the essence of the 'ego' as *res cogitans*.

The concentration of light that my will operates on an object is attention; the fact that other objects cease being illuminated then is abstraction.... That is what happens in the cogito, when my will condenses all my light on the thinking self by keeping in darkness all the contents of my thoughts. Thus attention is to my intelligence what accommodation is to vision.... But

²³ Pierre Thevanex. "The Question of the Radical Point of Departure in Descartes and Husserl." in *What is Phenomenology*. James Edie, Editor. Chicago: Quadrangle, 1962. p. 103.

thoughts. Thus attention is to my intelligence what accommodation is to vision.... But accommodation is no more the essence of vision than attention is the essence of my intelligence.

One would want to say here, still using Gueroult's terms, that for Husserl, it is the *cogitata* illuminated by the attentive light *reflected* from the cogito which are of thematic concern for an eidetic analysis. Specifically, it is reflection on what is disclosed within the intended as such which is of the essence of the phenomenological method.

Summary of the phases of doubt

It is the natural light, source of God-given eternal truths, which reveals that prejudices must be abandoned before one can begin to know where to look for a certain foundation for knowledge. Second, that one must detach oneself from sensorial world in order that one may not be predisposed to locate this "where" in the external, physical world. Third, that one abstain from affirming or denying any perceptual 'objects' of thought and judgements formed on their basis, since they may be "infected" by this-worldly instabilities, from which one has just withdrawn and detached. Fourth, that the stability and epistemic centrality established thereby allows one to clearly and distinctly grasp, in intellectual seeing, that which resists the destabilizing and decentering influence of the uncertain, of anything which has the least ground of doubt. Fifth, that by an act of will, in our fullest freedom, one endorses all that which has been clearly and distinctly seen, or can be posited as such: endorses also, as the source of this freedom, the perfection and infinitude of God. And finally, by holding in steadfast mental regard all the previous phases and their essential connectedness, one not only retains the certainty of any given phasal intuition, but also recapitulates all of these cognitive "moments" whenever a new concern calls forth a certainty once secured.

This is an attempt to answer the question initially proffered by Gaston Berger: what is the nature of the act in which the I grasps its ideas? In order to clear the ground for assaying an answer, it has been necessary to carefully untangle the dual sense of 'idea' and to show that it is legitimate to discuss ideas as cognitive acts. Further, to show that doubt is a distinct mode of thought identified by an as-if positing of idea-objects. That as much as there are necessary connections between idea-objects in their 'objective' reality, there are also necessary connections between act-ideas solely in terms of their act features. And finally, that these latter connections have an ordered sequence which proceeds from the banishment of all previously achieved knowings to the certain, indubitable foundation for all possible knowings.

CHAPTER 6

METHODICAL DOUBT AND THE PHENOMENOLOGICAL REDUCTION

In these investigations into the convergences and divergences between Descartes and Husserl, one should pause here for a reconnaissance of secured territory and future areas of enquiry. One pauses *here* because the juncture of Cartesian doubt and the phenomenological reduction is an explicit congruence of interest repeatedly acknowledged by Husserl himself and by Husserlian exegetes. It has been our contention that their respective overall projects trace complementary trajectories -- that is, both before the methodological inception of *epoche* and after its purging (or reducing) of the world has been accomplished. We have argued that for both thinkers it was through the study of mathematics that they came to realize the problem of the rational stepwise securing of mathematical cognition in adequate intuition. This impelled Descartes on a course toward algebraic geometry whose ontological ground was laid in the schema of simple and complex natures; and stimulated Husserl in the articulation of a formal ontology of parts and wholes.

Descartes confronted the most fundamental problem posed by skepticism -- how is it possible to have certain knowledge of the natural world -- by assuming the skeptics' position and pushing it to the limit in order to overturn any *skepsis*. Husserl's other great philosophical effort in his early period was directed towards empirical psychology and its attempts to validate logical laws. This was a position which Husserl characterized as an "absurd skepticism", i.e. a theoretical stance which denied the very possibility of theory in general, and which he thoroughly refuted by revealing its internal contradictions. One of the primary argumentative engines in this overthrow relied on a crucial conceptual distinction between the act of judging and the judgement itself; or in more comprehensive terms, between the psychical act and its intentional correlate. We have already shown that this fundamental phenomenological distinction, first disclosed by Brentano within the intentional structure of consciousness, was prefigured by Descartes in his discrimination of two senses of 'idea', i.e. act-idea and

idea-object. This dual notion is essential for Descartes to make sense of the "objective reality of an idea", that which characterizes the ontic status of the constituents of the subjective domain.

In addition to Husserl's repeated insistence on the importance of the Cartesian point of departure, there is another reason to pause here, and that is the abundance, even superfluity, of commentaries on this avowed influence. With one exception¹, these exegetes take for granted the accuracy, or at least relevance, of Husserl's references to Descartes' method of doubt and rarely seem willing to unpack what Descartes actually said that could have inspired Husserl. In other words, commentators report, explicate and criticize what Husserl *says about* his relation to Descartes, but are not very illuminating about the *relation* between the two thinkers. In this regard, such analyses are often excruciatingly accurate about Husserl's interpretation of the meaning of Descartes' project, but unenlightening about the meaning itself. It seems that here we have an opportunity to remain faithful to the phenomenological method in regard to Husserl's Descartes as a theme; that is, to discriminate what Husserl says about Descartes and what is said in this saying. Husserl can rightfully claim, for instance, that the Cartesian way is "already given" in the philosophical tradition -- it is something found as built into the natural-scientific attitude (for which, see below) -- but this claim cannot remain as an unexamined given for us in this research.

Although there are numerous and diverse interpretations of Descartes' method of doubt, at least there is one well-defined textual locus in which it is deployed, the first two Meditations. Such is not the case with the phenomenological reduction which, like most of Husserl's other central concepts and strategies, underwent continuous revision and expansion. From its first appearance in the *Idea of Phenomenology* (1906), through *Ideas: First Book* (1913), the lectures on *First Philosophy* (1923/24), the lectures on *Phenomenological Psychology* (1925), the *Cartesian Meditations* (1929), to the *Crisis* (1936), the reduction takes on many different guises and employs a burgeoning, almost bewildering, terminology. There is no one univocal definition or explanation of the phenomenological reduction,

¹ John Burkey begins his article with the commendable aim of reconstructing a Husserlian reading of Descartes' *Meditations* and to show the "conceptual enticements and limits" which Husserl found so compelling in this text. It is somewhat odd then that almost every quote is from Husserl and only one or two from Descartes; and that a sympathetic, informed commentary on Descartes is almost invisible. "Descartes, Skepticism, and Husserl's Hermeneutic Practice". *Husserl Studies*. 7 (1990), pp. 1-27.

though to be sure, there are *aspects* of its orientation which remain unchanged². It is simply not feasible to trace its chronological development, nor would that be, in any case, strictly relevant to our purpose. Neither would this purpose be served by an investigation of the consequences of the reduction as such, except insofar as it takes its point of departure from Descartes. Thus we will focus our attention on the Cartesian motivated reduction in its most mature version, in the *Cartesian Meditations*, and only then turn to Husserl's own criticisms of this way into phenomenology, in the *Crisis*.

Both Descartes and Husserl are strongly motivated to provide a basis for the autonomy of reason in *prima philosophia*, part of the original full title of Descartes' *Meditations* and of Husserl's lecture courses of 1923/24. That they would both formulate this in terms of an "all-embracing, universal science", is not a solecism, given their antipathy to then current *natural*-scientific theories. Descartes rejected the notion that any philosophy worthy of the name could be founded on the neo-Aristotelian/scholastic model of scientific enquiry, though he readily admitted that any Galilean-type physical science could be generated from, or at least be compatible with, his metaphysical first principles. [CSM III. 41, 124]

Husserl rejected the possibility that a genuine science of *consciousness* could be developed from empirical psychology and anthropology. If anything, he averred, their findings would always be corrigible if they did not take account of the a priori foundation of the very realm of being which they were investigating. Whether it be "classical" natural science, a psycho-physiological model or (today) a neurological schema, such models are concerned with contingent matters-of-fact, which could be otherwise, in actual instances of cognition (even if multiplied billions of times), and not with the formal a priori character of that which is cognized, which is always the one truth (e.g. in math/logical laws) grasped on many occasions. This science of consciousness is directed towards those structures of knowledge formation which *could not be otherwise*, and their articulation in universal principles. The natural-scientific model presupposes the general validity of such principles in order to construct arguments which have evidential, as opposed to merely probable, weight.

² For which, see Guido Kung. "Phenomenological Reduction as Epoche and Explication". in *Husserl: Expositions and Appraisals*. Ed. by F. A. Elliston & Peter McCormick. Univ. Notre Dame Press, 1977. pp. 338-49.

achievements. Since this document has not previously been brought into the context of the inauguration of the epoche and since it is a powerful declaration of intent in its own right, a crucial passage is here quoted *in extenso*.

Without getting clear on the general outlines of the sense, essence, methods and main points of a critique of reason, without having thought out, outlined, formulated and justified a general sketch of such a critique, I cannot live truly and sincerely. I have had enough of the torments of unclarity, of tottering back and forth in doubt. I have come to an inner stability. I know that this concerns high, even the highest matters.... I will, *I must*, approach these sublime goals, through self-sacrificing labour and purely disinterested absorption in the work. I am fighting for my life, and because of this have confidence that I shall be able to make progress.... Only one thing will fulfil me: I must come to clarity! Otherwise I cannot live. I cannot endure life without believing that I shall attain it -- that I myself can, with clear eyes, actually look into the promised land. [Early. 494]

This account finds a quite similar parallel in Descartes' "discovery" of the heuristic value of skeptical doubt, though it is not possible to trace this to any particular skeptical author. As Stephen Gaukroger and others have observed, there is no real notice taken of doubt, and definitely not as a methodological principle, before the *Discourse* (1637). At the end of Part Three [CSM I. 126], he famously refers to two distinct phases in his previous life. For nine years, after the revelatory dream of November 1619, he roamed the world, "a spectator rather than an actor in all the comedies that are played out there". A further eight years have elapsed since something happened which instilled in him a resolve to abandon those worldly pursuits and devote himself to philosophical reflection. This critical juncture in winter 1628/29 has left little documentary evidence but we know that it coincides with his abandonment of the *Rules* and his strange encounter with the mysterious Chandoux.⁵

At the home of the papal nuncio, a number of learned men had been invited to hear a lecture by this itinerant savant on "the new philosophy". Everyone except Descartes was favourably impressed by what apparently was a sustained and clever attack on neo-Aristotelian scholastic philosophy using skeptical tropes to demolish its prime tenets. It seems that Descartes fell into a "brown funk" and could

⁵ Adrien Baillet. *La Vie de Descartes*. Paris. 1691. Reprint, Georg Olms, 1970. vol. I, pp. 70-83.

not be roused to give his opinion for some time. Eventually, to everyone's astonishment, the young cavalier held forth at some length on the utter groundlessness and abundant sophistry in this peroration. He showed that Chandoux wanted to accept probability as the standard of truth, that opposite conclusions were at least as probable and that every skeptical trope could be countered with another, turning every truth into a falsehood. Cardinal Berulle was very impressed with this extempore speech and persuaded Descartes to organize and publish his arguments on this matter -- these were the seeds which bore fruit in the *Discourse on the Method*.

It is unfortunate that due to a lack of primary, corroborative testimony, this decisive episode is ignored or dismissed in a few sentences by most 20th century Descartes scholars. However, R. H. Popkin has forcibly argued⁶ that the meeting with Chandoux was "a microcosm of the plight of the whole learned world", and the instigation for Descartes' philosophical search for a certain foundation for knowledge in the sciences. It is our contention that this episode synthesizes two aspects of this turning point. First, it highlights a sort of philosophical *disgust* that anyone adroit enough with skeptical tropes could turn any statement on its head, and hence inspire a repugnance towards skepticism per se. And second, it signals the abandonment of the math/geometrical research already undertaken as being irremediably undermined by its lack of proper metaphysical foundations.

Thus there are several substantive parallels in the philosophical *motivations* for Descartes and Husserl: 1) disenchantment with, even rejection of, previous mathematical investigations; 2) a skeptical and/or personal crisis directed at the very heart of their own philosophical enterprise; 3) the resolve to ground a *mathesis universalis* on irreducible first principles; 4) the discovery of the methodological technique of epoche or suspension, but detached from its allegedly inevitable telos -- "Nothing is certain". These complementary motivations will impel both towards intrinsically congruent conclusions: 5) that a criterion for certain knowledge can be found entirely within the subjective/phenomenal domain: for Descartes this is the clarity and distinctness of an adequately grasped simple idea, for Husserl this is the self-givenness of that which appears in the appearance. 6) That this criterion is allowed to stand forth through a distinction internal to the cogitatum qua cogitatum, that between the psychical act and its

⁶ R. H. Popkin. *History of Scepticism from Erasmus to Spinoza*. Univ. California Press, 1979. pp. 172-7.

'objective' correlate. And 7) that what makes possible the reflective cognition of (5) and (6) is the transcendental ego, which is not to be confused with an empirical or mundane ego.⁷

With regard to this last point, it will be shown that it is a serious, if almost unavoidable, error to equate the ego in the Cartesian "ego cogito" with the mind in Meditation VI, the mind with which the body forms a factual, substantial union. In this connection, Descartes explicitly refers to a consciousness which is *transparent* to an already unified and unifying ego. [CSM II. 105] The focus of this present study is on the transition from (4) to (5) for both thinkers: this is accomplished through a methodical procedure which has an epistemological origin and metaphysical repercussions. Such an interpretative uncovering cannot be achieved by following only Husserl's analysis and critique of the Cartesian epoche, but must allow Descartes' own arguments to inform a complete account of the phenomenological reduction's originary impetus.

One initial problem which faces the Husserlian researcher is how many reductions are there and what are they called?⁸ That there is more than one is without question: references to "a further reduction" are common, whatever the textual source. Any reduction is usually characterized as total and universal, though some are enacted once and for all, others are brought in and out of play. Through the period of the *Cartesian Meditations* and *Phenomenological Psychology* Husserl had focused his attention on two ways into phenomenology: the Cartesian and the psychological. By the time of the *Crisis*, earlier glimmers, even brief sketches of a third way, sometimes referred to as "logical" or "ontological", have reached fruition and detailed elaboration.⁹ Here the third way from the lifeworld shares equally large attention with the way from psychology, completely over-shadowing the previous favourite, the

⁷ This assertion is supported by Gueroult's reading: "The fact that the cogito finds in its characteristic of most simple and most general ultimate nature the deep justification of certainty that we are constrained to give to it, proves that the reality it entails is not that of my personal *concrete self*, but that of my *thinking self in general*, as universal condition of all possible knowledge." Gueroult. *op. cit.* vol. I, p. 30.

⁸ Landgrebe comments on Husserl's Lectures on First Philosophy [HUS VIII]: "Husserl's attempts to distinguish these ways... contradict and partly cancel each other so that we cannot come to any confident conclusion as to how many ways Husserl had himself distinguished precisely because he had not reached any final differentiation." In "Husserl's Departure from Cartesianism", *op. cit.* p. 272.

⁹ For comments on this taxonomy of reductions, see C. W. Harvey. *Husserl's Phenomenology and the Foundations of Natural Science*. Ohio Univ. Press. 1989. p. 89: perhaps the most cogent summary of the plus and minus of the three ways is that by Jan Potocka. *Philosophy and Selected Writings*. Trans. & Ed. By Erazim Kohak. Univ. Chicago Press. 1989. Pp. 301-11.

Cartesian, now relegated to the stature of an historically ground-breaking, but abortive and misleading, attempt to disclose the nature of the phenomenal world. It is not to our purpose to explore the other two ways except insofar as they help to explain Husserl's disenchantment with Descartes and the consequent criticisms which he brings against the Cartesian epoche.

In any case, what first appears to be a bewildering variety of reductions, at least in terms of what they are called, becomes much more straight-forward when they are sited *within* the three different ways. Thus in Part IIIA, "The Way from the Lifeworld", the reductions are designated: 1) objective-science, 2) transcendental, and 3) intersubjective. [Crisis. 172, 79] In Part IIIB, "The Way from Psychology", they are: 1) psychological, 2) transcendental, and 3) intersubjective. [ibid. 256, 59] "The Cartesian Way", discussed as a brief part of Part II, distinguishes only two: 1) natural-sciences, or just plain science, 2) transcendental, with no third stage. [ibid. 78-80.] This last grouping should not be taken to indicate that Husserl claims that Descartes himself enacted a transcendental epoche, but that one can enact such an epoche from the Cartesian reduced standpoint. This two-stage reduction is indicative of the *Crisis*' disavowal of the Cartesian path, for in the *Cartesian Meditations*, the first two do indeed lead to the third, meticulously unfolded in the Fifth Meditation. Another well-known reduction, the "eidetic", has not been ignored in this schema, but is postponed until a proper context makes its significance relevant.

Several points should be readily noticeable: that each way begins with a "bracketing" of that theoretical field which it has made thematic; that each then proceeds to a transcendental reflection which reveals the necessary condition (within the subject) for the possibility of knowledge achievements; and that each returns to the pregiven world as one shared by other sense-giving and sentient beings. Only the Cartesian way falls short, in that by making a "leap" directly to the hypothesized transcendental ego, it arrives "empty of content" [ibid. 155]. Where does one go from here, since our guide Descartes has disappeared? Back to the beginning, remaining true to the injunction that one must always be an absolute beginner.

In *First Philosophy* (1923/24), Husserl looks both backwards to *Ideas: First Book* (1913) and forward to the *Cartesian Meditations* (1929) in historically situating Descartes' project in terms of the

skeptical legacy. For Husserl, the Greek skeptics, Plato and Descartes are the "three great beginners in the entire history of western philosophy". [HUS VII. 7] As we saw in Chapter 2, Husserl was greatly concerned with the skeptical undercurrents of 19th Century empirical psychology, but this on the part of psychologists who remained oblivious to the "hidden truth", the "eternal significance" of the original skeptical challenge. This challenge proceeded on two fronts, though from completely divergent and incompatible epistemological standpoints (hence its enigmatic "naturalness"). On the one hand, skeptics argued vehemently for the relativity and instability of subjective appearances, while restricting all presumed knowing to the sensory realm; as such, they questioned the *natural* thesis of the true being of the experienced world. On the other hand, they rejected as unintelligible a *reflective* thesis that there was a hidden, underlying reality behind these appearances and thus rejected the notion that the search for certain knowledge meant discovering a criterion of correspondence between the hidden and the apparent reality.

For the first time the naive pre-givenness of the world becomes problematic, and from there the world itself according to the possibility in principle of its cognition and according to the fundamental sense of its being-in-itself. In other words, for the first time the real world-whole, and in consequence the whole of possible objectivity in general, becomes transcendently considered as the object of possible knowledge, possible consciousness in general. It becomes considered in relation to subjectivity. [HUS VII. 59]

The skeptical challenge turned the very concept of objectivity into a problem which could not be accounted for by any theory whose truth condition for assertions, including those about the intelligibility of objective being, rested on a hypothetical correspondence between an adequate cognition and an unknown reality. The counter-position camouflaged in this charge of *petitio principii* was the radical insight that the criterion for certain knowledge was not to be found in an external *bridging* theorem but in an internal *fulfilling* (of evidence) procedure. Until the time of Descartes, skepticism was an entirely negative force, since it focused on where the criterion was *not* to be found -- it was a "hydra ever growing new heads". Its progeny were more truculent and garrulous than ever by the early 17th century, nourished on theologians' ambivalence regarding the standard for correct doctrinal interpretation.

With Descartes modernity begins because he first sought to satisfy theoretically the indubitable truth that lay at the basis of the skeptical arguments. He was the first to make theoretically his own the universal field of being, the very one which the extreme skeptical negations presupposed, and turn the argument back on them, namely on their own certain cognizing subjectivity. [HUS VII. 61]

Descartes famously begins this overturn by stating that since he has found much of what he took to be true to be false and that what he has built out of these alleged truths is highly dubious, it is time to demolish everything. He will thus open all his own previously held opinions to the skeptical onslaught. Not only is he willing to grapple with any skeptical argument, he even adds one of his own making, the fiction of the evil genius. Before considering his technique of withholding assent, it is as well to pause here and examine where he has started from on this long and arduous journey. What many commentators on Cartesian doubt neglect to point out is that, in addition to the *philosophical* thesis that what he has accepted until now has been acquired either from or through the senses, he has tacitly accepted the *natural* thesis of the world's objective being. All of his various opinions, though purged via the stages of methodical doubt, are still governed by an all-inclusive higher-order conviction in the objective reality of the world as it is given in appearances.

Let us clarify this point of departure for the phenomenological reduction in its Cartesian setting in the hope that thus, in this case anyway, we can have some idea of where it can be heading. No matter which stage in Husserl's writings one focuses on, he explicitly cites this as Descartes' method of universal doubt, and more specifically as the *attempt* to doubt. There is a crucial distinction made here by Husserl and then employed diligently in further reflections which find a *prima facie* equivalent in a distinction made by Descartes, ignorance of which led several of his critics in the wrong direction. To *attempt* to doubt everything, to put oneself in a position where anything that admits of the least doubt (minimum) is considered as though it were entirely false is *not* to consider everything as indeed false; it is not to negate or deny the (being of) the world. This is clearly stated in the first paragraph of Meditation II: "Anything which admits of the slightest doubt I will set aside just *as if* I had found it to be wholly false." [CSM II. 16] Since this is such a pivotal and commonly mistaken assertion, here is the

original: "removendo scilicet illud omne quod vel minimum dubitationis admittit, nihilo secius *quam si* omnino falsam esse comperissem." [AT VII. 24]

The quasi-positionality of this universal doubt is predelineated at the end of Meditation I where the meditator says that he will "deceive myself by *pretending* [esse fingam] for a time that these former opinions are utterly false and imaginary." Thoroughly exasperated by Bourdin's relentless misquoting of his original statements and thus attributing to him claims which he never made, this elision of "pretence" completely changes the purpose and scope of doubting. "Now my critic has ignored most of this passage [and] ... what is more, for the word 'pretend' he has substituted 'maintain and believe', and indeed 'believe' to the extent of taking the 'opposite of what is doubtful' and affirming it as true." [CSM II. 356]

Although the original sense of *fingere* is "to form or shape", in classical Latin its broader connotations embraced the notions of "suppose, consider; imagine". However, Descartes has quite precise terms for each of these notions, and *fingere* is reserved for "pretend or invent"; its past participle is *fictum* from whence English "fiction". This may seem a curious etymological digression, but it is in fact essential to one of the strands of the principal theme: that Cartesian doubt is not a world-denial or negation, but a procedural requirement to establish the threshold of what can then be admitted as not being susceptible to being put out of play. One critic (and great admirer) of Descartes who places acute emphasis on doubt as denial and rejection, instead of on *suspension* of that which is considered doubtful, is Husserl himself.¹⁰

In the standard vocabulary of the period, the Latin for the Greek *epoche* was *suspense*, e.g. in Gassendi and translations of Sextus Empiricus; the French was *suspendre* or *surseance*, e.g. in Montaigne and Pierre Charron. It is no accident or puzzling oversight that, aside from one later emendation in the French text, there is no occurrence of the term *suspensio* in the *Meditations*. Everyone just assumes that since the overall *message* (or purpose) of skeptical *epoche* is there, the precise *concept* which is its vehicle must also be found in the text -- but this is not obviously so. The one exception is on

¹⁰ "The *supposition of non-being* [is] part of the substratum of the attempt to doubt. In Descartes, this part is so predominant that one can say that his attempt to doubt universally is properly an attempt to negate universally." [Ideas I. 59]

the last page of Meditation I, where Descartes remarks that if it is not (so far) in my power to know any truth, "I shall at least do what is in my power, that is resolutely guard against assenting to any falsehoods." [AT VII. 23] The French translation slightly expands on what is in his power before expressing his resolve: "à tout le moins il est en ma puissance de *suspendre* mon jugement." [AT IX. 18] The only other occurrence is much later in the *Principles*, Part I, section 39: "dont nous ne pouvions douter pendant une *suspension* si générale." [AT IX(B). 41]¹¹

Let us note, in passing, that though for Husserl "epoche" and "reduction" are often used as synonyms, such that it is easy to read one for the other in any given passage, one can tentatively discriminate between these two terms. Epoché signifies the initial moment (dependent part) of "bracketing", the putting in place of the brackets in order to take out of play what is contained in the brackets; it is thus the necessary higher order "act" which initiates the reduction.¹² Husserl's original term for this is *Einklammerung*, a technical mathematical operation which places a number in brackets $|1|$, such that it has neither positive nor negative value; if no value is indicated for an unbracketed number, the value is always assumed to be positive, $+1$. The analogy here is then quite obvious: one always assumes a positive "value" for the natural thesis of the world, viz. that it does indeed exist "outside" our consciousness of it. This mathematical analogy will be of some help when we come to consider the meaning of the *eidetic* reduction. In brief: the first stage of the reduction places brackets around some apparent thing, e.g. this table, t_1 , so that it no longer has a presumptivethetic value, $|t_1|$; the second stage, through the technique of free variation transforms this one bracketed concretum into a variable, $|x_{t_1}|$; the third stage seeks to discern the invariable within all of the invariants, that is, to disclose the *essence* of "table", $|e_{t_1}|$, still deprived of any presuppositions about its existence independent of any possible consciousness.

Searching for our own point of departure from which to come to grips with the necessity of the points of departure which Descartes and Husserl have blazoned as distinctively their own, we could not

¹¹ The CSM translation [I:206] of this passage obscures this rare use of the term "suspension" by rendering it "supposition", the same term they use to render the French *suppositions* in the previous sentence.

¹² This interpretation of epoché is supported by Elliston & McCormick, the editors of HSW, see p. 367; and by H. Spiegelberg. *op.cit.* pp. 134, 715, 724.

do better than to follow the order of reasons which they both enjoin, and thus proceed little by little from the simple to the more complex. One who is about to begin philosophizing finds oneself already living in a natural world; what this means can be made clear by "simple meditations which can best be carried out in the first person singular" [Ideas I. 51]; "Philosophy (wisdom) is the philosopher's quite personal affair." [CM. 2]

Environed by things, persons, values, traditions, customs and a corpus of received opinions about all of these, what underscores them all is the unexamined belief, the naive acceptance in the being of the world just as it is given in one's natural living. For those who are motivated to philosophize, i.e. those who have already stepped back from this living and made of it a possible theme of enquiry, the skeptical challenge transforms this enquiry into a problematic. It specifically disassociates any query about the world in itself being answered by an appeal to the manners in which worldly things appear to the questioner. No certain answers are forthcoming, only probable or practical rules-of-thumb which are at least preferable to remaining in an *aporia*.

But does the philosopher not have, *as a matter of fact*, a theoretical model, namely the natural sciences, which would provide guidance in ascertaining what sort of evidence a belief must have in order to at least qualify as possible knowledge; and moreover provide a formal procedure which permits the interlinking of belief statements in a valid manner? Descartes does indeed agree that there is such a theoretical model, that the *Meditations* are designed in the "geometrical fashion", but that this has to be purified of prejudices and preconceptions in order to be refounded on a more solid basis. On several occasions he not only claims that specific results of his physiological investigations support his epistemological claims (e.g. theory of visual perception) but that his metaphysics lead on directly to his physics. Husserl, on the other hand, is not going to acquiesce in any established model, that the "matter-of-factness" of natural scientific theory is itself already given as another worldly objectivity, and is thus open to the same skeptical assault. Another way to phrase their diametrical positions is: Descartes revolted against the *unscientific* approach to issues of legitimate knowledge, whereas Husserl rejected any *pro-scientific* attitude to consciousness as mistaken *tout court*.

Descartes was repulsed by the pseudo-scientific character of then-current studies in the art of memory, anatomy, optics, and the false sciences (such as alchemy and astrology), so disparaged in Part One of the *Discourse* [CSM I. 113-5]. *The World (or Treatise on Light)* and the *Treatise of Man* (1629-33) explicitly endorse not only the Galilean model of the cosmos but also the Galilean mathematical method of demonstration; only Galileo's condemnation prevented their publication. In contrast, Husserl revolts against the natural-scientific model itself as one which is not suitable for investigations into the nature and structure of consciousness, an orientation most notoriously displayed in empirical psychology. For him, the Galilean objectivization of nature was the source of a false theoretical equilibration between descriptive statements about psychical states of affairs and explanatory statements in physical sciences language about the alleged *origin and validity* of those states of affairs.

Husserl thus argues in a direction opposite to that of Descartes: that the natural sciences are already given to the philosopher's reflection as knowledge *achievements* which have to be accounted for in terms of the scientist's cognitive ability to reach these "ideal" objects. This can only be accomplished in an incorrigible manner by the elaboration of a formal a priori science of consciousness per se. C. W. Harvey is quite right in saying that Husserl does not always "distinguish sharply enough between the positing theses of the natural attitude and the positing theses of the natural *scientific* attitude."¹³ But Husserl at least once overtly makes this distinction, in the *Crisis* [140-5] in the course of one of his numerous redactions of the stages or steps in the phenomenological reduction. Though perhaps Pierre Thevanex goes too far in his *précis* of Descartes' and Husserl's orientation towards natural science.

Descartes defined his ambition in reference to an uncertain science and philosophy, and his reform aimed initially at making a clean slate, then at remaking science *ab ovo*. It was a question of assuring the basis of an unshakeable certitude of a cornerstone for the edifice of future science.... Husserl, on the other hand, found himself in the presence of a secure science, a completed science, in possession of its practical usefulness and its uncontested results.... The crisis of science did not touch its results but only its foundations and its meaning.¹⁴

¹³ C. W. Harvey. *op. cit.* pp. 105-6.

¹⁴ Pierre Thevanex. *What is Phenomenology? and Other Essays*. Ed. & trans. by James Edie. Chicago: Quadrangle, 1962. pp. 97-8. Many of Thevanex' brilliant insights are marred by an exaggeration of

It is then my decision, as the philosopher engaged in this activity, to no longer acquiesce in the tacit presupposition that the world exists as an absolute datum. The philosopher does so in the complete freedom to withhold his assent: "the attempt to doubt universally belongs to the realm of our perfect freedom." If this attempt does not have universal scope, it undercuts its own radical ambition, since insofar as it only counters particular skeptical tropes, it leaves the general thesis intact. Husserl synthesizes the general thesis thus: one finds the world actuality as a "factually existent actuality and also accepts it as it presents itself to me as factually existing. No doubt about or rejection of data *belonging to the natural world* alters in any respect *the general positing* which characterizes the natural attitude." [Ideas I. 57]

Descartes also acknowledges that the first two stages of doubt -- illusions of sensory experience and delusions of dreaming states -- are processes in the accepted natural world, that when stricken out are not enough to overcome the criterion which excludes a minimum of uncertainty. Even if corrected for, this leaves unresolved the objective status of their source; only the fiction of the evil genius can cast doubt on the being of the world itself, as the only feasible source for illusions and delusions. Descartes thus indicts the prime suspect: "What is my reason for thinking that [ideas] resemble these things? Nature has apparently taught me to think this... [that is] a spontaneous impulse leads me to believe it, not that its truth has been revealed to me by some natural light." [CSM II. 26]

Descartes' discussion throughout the first three Meditations of the preconceived opinions with which he began his enquiry are hold-overs from his pre-theoretical (or pre-reflective) starting point within naive experience. Each of them is taken up, according to the order of reasons, and then examined from the purified position secured through the establishment of the first certain truth, the cogito. Nevertheless, these opinions and beliefs (which Gassendi chided him for retaining) have not been purged or vaporized by hyperbolic doubt. Insofar as they were constituents of pre-theoretical worldly knowledge they were inexplicit and unthematic; but methodic doubt serves to make them thematic and to explicate

Descartes' and Husserl's respective positions, so that they always seem to be at two extremes on any given issue.

their origin in the natural standpoint. "Whereas Cartesian epoche is prompted by the defect of the teaching of nature, Husserl's epoche thematizes the very naturalness of the natural attitude."¹⁵

We can now proceed with the potential and inexplicit positing precisely as we can with the explicit judgement positing. One procedure, possible at any time, is the attempt to doubt universally which Descartes carried out for an entirely different purpose with a view toward bringing out a sphere of absolutely indubitable being. We start from here, but at the same time emphasize that the attempt to doubt universally shall serve us only as a methodic expedient. [Ideas I. 58]

Here "methodic expedient" functions as an express route for the way into phenomenology, one which will be derogated later in favour of more incremental approaches. Where the first divergence occurred at Descartes' presumptive and Husserl's non-presumptive attitudes toward natural science, here a second divergence erupts, i.e. in respect to the fact that this attempt to doubt effects an "annulment" of positing per se. For Husserl, this does not mean a change of a positing into a counter-positing, a rendering of the positing as merely possible, undecided, or *doubtful* -- "Rather it is something wholly peculiar". Descartes, in contrast, employs as a "methodic expedient" a type of skeptical *isosthenia*: allowing the counter-positing to assume an equal-weighted claim in order *then* to withhold assent from either of them. He achieves this by turning his will in "the completely opposite direction until the weight of preconceived opinion is *counter-balanced* and the distorting influence of habit no longer prevents my judgement from perceiving things correctly." [CSM II.15]

Bourdin in the 7th Objections, as was *his* habit, misinterpreted this and declared that Descartes should thus have been compelled to assent to the opposite, since if doubt had shown that *p* was false, then surely *not-p* was true. To which Descartes responded that "I did not mean that I should regard either side as true, or set this principle up as the basis of a system of certain knowledge". [CSM II. 313] Bourdin misses precisely the *quasi*-positional nature of universal doubt which modifies not the belief qua belief, whose eventual truth-status will ultimately be resolved, but instead modifies (puts out of play) the presumed conditions under which one can *know* that the belief is true or false. Nevertheless, this is not

¹⁵ Walter Soffer. "Husserl's Neo-Cartesianism". *Research in Phenomenology*. XI (1981) p. 147.

the criticism which Husserl introduces here, for the second divergence revolves around the two-sidedness of the phenomenological epoche. In terms of its act-character, the putting-out-of-action remains in place as a *permanent* modification of conscious regard; and in terms of its 'objective', what has been stricken out remains held in the suspension. Let us call these two aspects, the parenthetical act (of the epoche as moment) and the thesis within the parenthesis.

In what we have continued to refer to as the quasi-positing of doubt, i.e. to consider *as if* false, the positing indicates the *directedness towards* something which is intrinsic to the intentional structure of consciousness. [cf. Ideas I. 72] However, as pointed out in Chapter 5, this is not another mode of cognition in the same way that imagination, memory and perception are modes. Whether or not my memory, fantasy (etc.) of x adequately represents the remembered, fantasized (etc.) x, it still *seems* to me that my memory (etc.) of x is such-and-such. My conscious intending, in the manner of memory, can itself be put out of action, set aside, such that one can consider the memory of x qua memorial x as if it were false. The as-if feature serves to contrast this type of directedness from all *acts* of positing, and that means to posit the being of an 'object' precisely in the manner of the 'objective' reality of an idea. In fine, the intentional 'object' of conscious regard cannot be *given* as dubious in the way that it can be given as imaginary or memorial. As such, universal doubt is a *reflective* act of consciousness which takes other cognitive acts as idea-objects, including that inexplicit aspect of the idea-object that the object *itself* exists; "our understanding of other things always involves understanding them *as if* they were existing things". [CSM II. 83]

What is it then that is put out of action, stricken out, and so forth when one adopts this quasi-positional attitude? Not the reality of the idea, for that is made the 'object' of a higher order act; Husserl remarks that the phrase "putting out of action" is literally apropos here, since it relates to the act-feature. What would allow the cogitatum to remain while the mode of the cogito is altered? Only that it no longer brings with it the *general thesis* of the objective in-itself of the world towards which all positings are allegedly oriented. Just as the act-phrase is better suited to the noetic aspect of consciousness, so the "metaphor" of parenthesis is more suited to the objectual/noematic domain. [Ideas I. 60] This then is Husserl's clearest terminological expansion of the sense of phenomenological epoche:

The positing undergoes a modification: while it in itself remains what it is, we so to speak, "put it out of action", we "exclude it", we "parenthesize it". It is *still there*, like the parenthesized in the parentheses, like the excluded outside the context of inclusion. We can also say: the positing is a mental process, but we make no use of it... [it is] a specifically peculiar mode of consciousness. [Ideas I. 59; cf. 113]

The etymological meaning of parenthesis is "place beside with": the thesis of the world's being remains "beside with" the alteration which it undergoes in the epoche.¹⁶ The being of the world precisely as it is given to consciousness and thus all those appearances which are or could be illusory, doubtful, etc., are considered as indicative of just those manners of givenness in which appearing things appear. A clear-headed understanding of this is absolutely vital to appreciate the fundamental orientation of phenomenology in general. That a stick looks bent in water, that the contents of dreams seem like veridical experiences, etc. are not problems to be *overcome* by a theory of knowledge, but indicators of the way (the "how") in which things could not possibly be given otherwise. Efforts to correct or adjust for their not appearing in manners which are self-evidentially certain is to import a theoretical preconception about the relation between phenomena and the things themselves which could only be justified by an appeal to an unknowable reality.

Later in the *Crisis*, Husserl chides Descartes for the fact that he takes it for granted that the phenomena point to a realm of the in-itself, though it can deceive us, and that there must be a rational method for dispelling this deception. Descartes hopes to achieve this through the purging of methodical doubt, but should not this taken-for-grantedness and this reconciliation itself be bracketed through the epoche? Despite his radical, ground-breaking procedure, Descartes has a goal in advance¹⁷, before his meditations began, in virtue of which methodical doubt and the cogito are *means*. "I see that without any effort I have now finally got back to where I wanted." [CSM II. 22] True radicalism "is not achieved by

¹⁶ The symbolic use of parentheses is taken up by Eduard Marbach in his ingenious development of a phenomenological notation. See his *Mental Representation and Consciousness*. Kluwer, 1993. pp. 19-40.

¹⁷ Though one might claim that Husserl also has a prefigured goal: These analyses are "so many necessary steps for reaching the goal *continually guiding us*, namely the acquisition of the essence of that pure consciousness which will determine the field of phenomenology." [Ideas I. 81; cf. also 104]

merely deciding on the *epoche*, on the radical withholding of [judgement on] all that is pregiven, on all prior validities of what is in the world; *the epoche must seriously be and remain in effect*". [Crisis. 79]

The converse aspect of this second divergence in terms of modification of the reflective act-mode which would maintain the thesis within brackets, i.e. transforming acceptance of the world's being into an acceptance-phenomenon, is that the modification cannot be relinquished. Descartes acknowledges the issue of the persistence of universal doubt and considers its *avoidance* a prime concern. If anything, he thought that to maintain such doubt beyond its necessary employment would lead to hyperbolic doubt which was counter-productive and would obviate efforts to establish practical results in the sciences. The reason why universal doubt does not have to remain in force is due largely to the fact that, since the *cogito* has been secured in certain intuition, it provides a fulcral point from which to *return* to the natural world.

Having established this exemplary first truth and the mode of its adequate grasping in insightful attention, the memory of this securing and all its subsequent enchained truths prevents doubt from re-infecting one's newly acquired knowledge.

So long as we attend to a truth which we perceive very clearly, we cannot doubt it. But when, as often happens, we are not attending to any truth in this way, then even though we remember that we have previously perceived many things very clearly, nevertheless there will be nothing which we may not justly doubt as long as we do not know that whatever we clearly perceive is true. [CSM II. 309; cf. II. 100, 171]

The significance of the *cogito* as first truth in the order of reasons is to disclose an epistemic criterion *within* the purified domain of 'objective' being in order then to be able to employ it in proving the validity of other non-objective claims made about the relation between the posited as such and a "reality" to which it makes reference. Since this relation holds between the formal cause of the idea and its 'objective' being in the intellect, further knowing is open to possible doubt which can only be corrected by recourse to the prior criterion. The disparity in Descartes' and Husserl's respective notions of evidence points both to the potential inadequacy of Cartesian evidence -- which he indeed recognized in searching for a further guarantee in divine veracity -- upon which Husserl's notion of apodicticity

supervenes *and* also points to the necessity of the phenomenological reduction remaining in force throughout every analysis.

Any evidence is a grasping of something itself that is, or is thus, a grasping in the mode "it itself", with full certainty of its being, a certainty that accordingly excludes every doubt. But it does not follow that full certainty excludes the conceivability that what is evident could subsequently *become doubtful*.... An *apodictic* evidence, however, is not merely certainty of the [states of] affairs evident in it; rather it discloses itself, to a critical reflection, as having the *signal peculiarity* of being at the same time the *absolute unimagineness* (inconceivability) of their non-being, and thus excluding in advance every doubt as 'objectless', empty. [CM. 15-6; emphasis altered]

Persistence of Previous Formal Ontological Schemas

Lest it seem that these junctures are nothing but a rhizome of divergences, we can point to one critically overlooked continuity: the persistence of a prior convergence on the formal ontological level. The simple-complex schema first articulated in Rule XII is consistently appealed to by the meditator throughout the stages of methodical doubt. As well, Husserl makes repeated use of part-whole theory in his unpacking of the reduction, and this not as a reconstruction of Descartes' course but as a procedure explicitly discriminated from that course. A succinct exegesis¹⁸ of simple-complex natures within doubt will be synopsized here.

The process of universal doubt moves from the complex to the simple and is accomplished according to the order of reasons. Not only do the senses sometimes deceive us, but all sensory perceptions may perhaps be only the contents of dreams. Dreams are imaginary only because they arbitrarily combine simpler (but not purely simple) components, but these components can only be taken as real since they are taken as the simplest and thus escape the possible artificiality of composition. However, these elements are actually composites themselves (e.g. eyes, heads, hands, etc.) and since it is conceivable that they are imaginary, they are thus open to being doubted. It is thus necessary to proceed

¹⁸ For which see, Jean-Luc Marion. "Cartesian Metaphysics & the Role of the Simple Natures." in *Cambridge Companion to Descartes*. Ed. by John Cottingham. Cambridge, 1992. pp. 115-39.

to the ontological level of the elements of those elements (shape, number, quantity, etc.) that are entirely simple and hence escape the arbitrariness of composition. These are not open to being doubted since any cognitive grasp of them must be given in a clear and distinct seeing, and such ideas are by their very nature given with evidential certainty.

Analysis of ideas in the stepwise manner advocated by the meditator considers the presumed origin of those ideas, although it has not yet uncovered the 'objective' reality intrinsic to ideas. Descartes has already made an important dichotomy in this respect between adventitious and artificial ideas, on the one hand, which are composites and have an admixture of external qualities; and simple ideas, on the other, which can be either sensible or intellective. All those ideas which are irreducible or simple natures, whether they are intellective or sensible, are necessarily indubitable, since they cannot be artificial. These are the first notions, or immediate givens, which Descartes will later argue are innate and revealed by the natural light. At this point in the chain of reasons, only the simple intellective natures are retained in his explication of the objective reality of ideas. After reviewing the features of sense deception in Appendix VI of the original *Crisis* [HUS VI. 403-5], Husserl allows that even if all appearances are only a dream, even if no experience corresponds with "reality" as such, this does not invalidate the status of math-geometrical propositions. Since there seems to be no ground to doubt the validity of a priori knowledge, the problem emerges when the philosopher/scientist wants to employ mathematics as the basis for judgements about the necessary form of regularities in nature.

For Husserl, the universal depriving of acceptance of the general thesis does not leave us confronting nothing. On the contrary, we gain possession of something through the epoche: "my pure living" and the subjective processes which comprise this, i.e. the universe of phenomena and the pure ego for whom these exist. [CM. 20] This purified or reduced ego is not a piece (independent part) of the world, nor is the world or any worldly thing a piece of my ego, found in my consciousness as a really inherent part of it, as a complex of data of sensations or a complex of acts. [ibid. 26] The proper task of reflection is to explicate what can be found in the original subjective process, now altered in such a manner that it exposes the intentional structure of all such pre-reflective processes. Thus reduced, the ego is fully aware that the experience of an objectual perception includes all of its constituent moments

(dependent parts) which are prefigured in the horizon of not-yet-given but expected perceptions. These comprise both the moments of the perceiving act itself and the moments of the perceived 'object'. [ibid.]

A transcendental descriptive analysis can start with nothing other than the ego cogito, which is parallel to the disclosure of the empirical ego in all its concrete fullness. But it must not confuse one enquiry with the other and begin with a physicalistic account of sensation. If the analyst does so, then: "In advance... one misinterprets conscious life as a complex of data of external and (at best) internal sensuousness; then one lets form-qualities [gestalts] take care of combining such data into wholes." To avoid the inevitable problem of an atomistic version of immaterial contents, one then fallaciously inserts "the theory that the forms or configurations are founded on these data necessarily and the wholes are therefore prior in themselves to the parts." [ibid. 38] In contrast to this, phenomenological enquiry into consciousness concerns two aspects (the noetic and the noematic) which belong together inseparably and which are present in all conscious acts combined according to a unique process, that of synthesis. Synthetic structures of possible combinations give unity to single cogitations in themselves as concrete wholes and in relation to one another, i.e. as founded moments of the basic form of all possible syntheses, internal time consciousness.

The Cartesian Hinge & the Husserlian Hinge: the Gate into Phenomenology

We are at a fulcral point in Descartes' and Husserl's arguments from which many other divergences will emerge: the theme of the cogito as *res cogitans* versus the cogitatum qua cogitatum; the transcendence of god and the natural light which also must be bracketed; the empirical ego and its "shadow" versus the genuine transcendental ego, and so forth. As we have seen, there is arguably a notion of intentionality in Descartes, and as we shall see, a glimpse of the transcendental ego, but he touches on these notions in the way that he remarks that a finite mind may grasp the infinite [CSM II. 81]; in other words, he grasps (*prendre*) a simple idea, but does not have a complete understanding (*comprendre*) of this ego.

Throughout Husserl's writings on the Cartesian point of departure, there are references to a "threshold" or "gate"¹⁹ -- a gate is a transition point which gives on to a way or path. Husserl has meditated along with Descartes until the end of Meditation II: from the explication of the method of universal doubt to the disclosure of the cogito, after which there is little if any direct commentary. The opening of Meditation III is a *hinge* in the entire structure of the *Meditations* as it follows the order of reasons, a hinge which occurs within an overall coherent framework.²⁰ Beyond this juncture Descartes begins a return journey, recapitulating what has been lost through methodical doubt by what has been gained through the double guarantee of divine veracity and clear and distinct seeing. This approximate point in Husserl's own founding of the phenomenological project, following the order of cognitions, also signals a hinge though not in the sense of a *refolding*, but more of a continuous *unfolding*.

What happens here at these two hinge-points? Why does one hinge pivot (so to speak) on the other? The answer to this will also lead to an eventual answer to the question: why does Husserl abandon the Cartesian way into phenomenology? The name of the gate is *transcendence*: before this gate Descartes balked, beyond this gate lies the domain of transcendental phenomenology. Beyond this gate also many of his students (and current critics) will not venture. Much of the very recent *rapprochement* between the two "traditions" is centred around Husserl's work before this turning point, as though it were not conceivable that problems generated *before* this gate can only be resolved *after*. In any case, Descartes "stands on the threshold of the greatest of all discoveries... yet he does not grasp its proper sense, the sense namely of transcendental subjectivity, and so he does not pass through the gateway that leads into genuine transcendental philosophy." [CM. 24-5] This acknowledgement is later re-worked in these startling terms: "The original Cartesian motif [is] that of pressing forward through the hell of an unsurpassable, quasi-skeptical *epoche* toward the gates of the heaven of an absolutely rational philosophy." [Crisis. 77]

¹⁹ HSW. 319; Ideas I. 56; CM. 24; Crisis. 77, 153.

²⁰ Descartes' *Meditations* is not the only work which was thought of by its author as a unified interconnection of chains of reasons; "The infinity of tasks disclosed by our extremely general preliminary sketch ... are a chain of particular meditations fitting into the universal frame of one unitary meditation, which can always be carried further synthetically." Husserl. CM. 87.

If the notion of transcendence can be clarified here, this study will also be able to press forward to a rational understanding of why this one path is so inextricably linked to the Cartesian incipit and at the same time leads off in an entirely unexpected direction. Within the confines of this particular topical study, we can only begin to make clear a highly charged and profound problematic -- but if we begin in the *right way* at least this beginning won't have to be engaged again. In all phenomena, strictly as "showing-forth", some thing is given to consciousness and always given in some determinate manner, i.e. in the "how" of its givenness. The delineation of the intentional structure of consciousness allows one to discriminate the psychical act from its 'object' insofar as it is immanent to consciousness, irrespective of course as to whether or not there is some actual object "out there". The unknowable mind-independent object is a spurious transcendence, first delimited by Husserl in the lectures of 1905/06 and not the notion which is under phenomenological investigation. For something to be an *object* is (literally) for it to stand (or lie) "over against" consciousness, and insofar as it is an intentional 'object', it does so (or is so) in an absolutely unique manner.

The way in which an 'object' is included in consciousness is not the way in which an object is a real part of the world. Nor on the other hand, is it included in the way in which psychical acts are moments of a unitary consciousness, which are not only unable to exist without the mind's existence, but are immanent to the ongoing stream of my conscious living. Transcendence consists in the 'object' being non-really included in consciousness, inasmuch as any worldly object participates only in the *reduced* sense of the world as acceptance-phenomenon and the purified ego bears within itself the world as accepted sense. The way in which an intentional 'object' exists is "a being-in of a completely unique kind: not a being in consciousness as a really intrinsic component part, but rather a being in it *ideally* as something intentional, something appearing... a being-in-it as its immanent *objective sense*." [CM. 42] This quotation should evoke a strong resonance with Descartes' definition of the objective reality of an idea: "The idea [is] never outside the intellect, and in this sense 'objective being' simply means being in the intellect in the way in which objects are normally there." [CSM II. 74]

Though a phenomenological reading of Cartesian idea does accord well with an interpretation of this link in Meditation III as a version of proto-intentionality, it would be misleading to construe it as

indicative of a hitherto unheard of transcendental turn. In the context of Meditation III, an ambiguity in the sense of 'idea' is cleared up: 'objective reality' is introduced to distinguish it from the 'formal reality' of an idea, i.e. the cause of the idea as such. If anything, the only genuine transcendence (sic) in Descartes would pertain to the ultimate cause of an idea, a cause which in the case of the ideas of infinity and perfection can only exist outside the mind. This principle of causality would perforce be excluded by the reduction as another belief founded on the general thesis of the world's being, specifically the belief that mental events are causally related to worldly objects in the way in which worldly objects are related to one another. Husserl's criticism here is that no philosophical or scientific investigation can ever establish the validity of this belief since it misconstrues the essential 'nature' of consciousness as ground for the appearance of the world itself.

A collateral distinction is made with respect to the ego in the formula "ego - cogito - cogitatum". To construe the cogitatum (idea) as a 'real part' of the mind is to obliterate its necessarily transcendental character, which then leads one to consider the object in itself "outside" the mind as the genuine transcendence -- an absurd notion²¹ -- and the totality of psychic life as the only immanence. This compression into one intramental term of psychical acts and their 'objects', i.e. the non-observance of the heterogeneous status of the two sides of intentionality, leads one in the converse direction towards a notion of the ego as factually and contingently determined. This ego, the one which Husserl identifies as the Cartesian meditator, does "bear within himself" the world as an accepted sense. This sense is first tacitly accepted in the natural attitude, then called into question by universal doubt, and then purified through the filter of clear and distinct seeing.

This identification generates an immense problematic: for this ego, defined by Descartes as *res cogitans*, a thinking thing, is a substance and though "really distinct" from *res extensa*, it nevertheless appears again as another thing in the natural world. As such, it is accessible to a type of perception, *inspectio mentis*, which is of the same order as all other objective experiences; though to be sure, it is not of the same specious insight as Hume's "looking within oneself". The ego secured through the

²¹ This spurious sense of transcendence was first discussed in IP (*passim*); as an absurd notion, "a round square", see Ideas I. 129; CM. 84. It is vitally important to distinguish this excluded sense from Husserl's novel reworking, see C. W. Harvey. *op. cit.* pp. 80-3; T. de Boer. *op. cit.* pp. 319-21.

Cartesian epoche has a certainty which attaches to an empirical fact; in this case (granted) to an indubitable fact, first in the order of reasons. For Husserl, it is not first in the order of cognitions revealed by the phenomenological reduction since the *ground* for the worldliness of any worldly thing cannot itself appear as an object in the world but must be genetically prior in the sense that it is presupposed as the condition for anything worldly appearing at all. "This world, with all its objects derives its whole sense and its existential status, which it has for me, from me myself, from me as the transcendental ego, the ego who comes to the fore only with the transcendental epoche." [CM. 26]

From Husserl's point of view, in Descartes there is a conflation between, on the one hand, the mundane, empirical ego, united with the body in a *substantial* union which can only be explained by recourse to psycho-physical *causality*; and on the other hand, the transcendental ego as the ground condition according to which that which appears, as a substance, as causally related, as part of a whole, etc., can appear at all. This is why, despite Husserl's unwavering respect for Descartes, he can still censure him for being "the progenitor of the psychologism which saturates the whole of modern philosophy" [HUS VII. 338]; or "the father of transcendental realism, an absurd position." [CM. 24]

Thus far Husserl's critique of Descartes' purified psychological ego; but how accurate an assessment is this of Descartes' own explication of the nature of the ego in *ego cogito*? It definitely accords well with a standard line of interpretation, but on the issue of transcendental experience, Gaston Berger once remarked: "One cannot say that Descartes was ignorant of this domain if one believes the words he puts in the mouth of Polyandre in the final lines of what has reached us of *The Search After Truth*: 'There are so many things' contained in the idea of a thinking thing that entire days would be needed to unfold them'." ²² Berger leaves the discussion with this provocative apercu (as did Polyandre before him); but an emphasis should be placed on the word "idea", for an idea of *res cogitans* is not the same as *res cogitans qua res*, even if this is defined as the "nature" of the ego. Gueroult does emphasize this difference which then allows the ego's "universal condition" to stand forth, a condition which precisely implicates transcendence.

²² Gaston Berger. *The Cogito in Husserl's Phenomenology*. trans. by Kathleen McLaughlin. Northwestern Univ. Press, 1972. p. 110.

The fact that the cogito finds in its characteristic of most simple and most general ultimate nature the deep justification of certainty that we are constrained to give to it, proves that the reality it entails is not that of my personal concrete self, but that of my thinking self in general, as universal condition of all possible knowledge.²³

As for Polyandre, if he had devoted more days, i.e. meditational exercises, to the task of explicating the nature of the soul or mind, he might have uncovered all of those attributes of the ego which though previously unknown could be truly predicated of that which is certainly known, namely that the *principal* attribute of the mind is thought. Only insofar as the mind is *really* united with the body in the individual person is it a substance, a thing unlike the bodily thing. However, in respect to the *idea* of the mind, i.e. the objective reality of its idea, it is *modally* distinct from the idea of body. Husserl's criticisms regarding the "reification" of the mind are, strictly speaking, only pertinent to the mind as a self-subsistent substance:

Consciousness... is not a psychical experience, not a network of psychical experiences, not a thing, not an appendage (state or action) to a natural object. Who will save us from the reification of consciousness? He would be the saviour of philosophy, indeed the creator of philosophy. [1905 ms]²⁴

Descartes himself strongly objected to Hobbes' surreptitious replacement of the original notion of abstract being with "concrete words" [CSM II. 123]. As an abstract being, the mind's autonomy is only endorsed by the possibility of its being conceived clearly and distinctly as a whole separable from any other whole, and the result of a process of "stripping away" all the attributes that do not properly belong to it. As a concrete being, however, the *mindful body* is always what is given to our understanding *before* the process of abstraction begins.

In this regard, the ego even as an abstract being is indeed a residue or a *remnant* of doubt's purging, the focus of another charge which Husserl will direct at Descartes.²⁵ However, on Descartes' own injunction [CSM II. 78], one must not confuse the question whether (*quod*) something is a substance

²³ Gueroult. *op. cit.* vol. I, p. 30.

²⁴ Husserl ms., quoted by Bernet, Kern & Marbach. *op. cit.* p. 62.

²⁵ Walter Soffer also correctly recognizes this ambiguity and states that Husserl's charge that Descartes rescued "a little tag-end of the world" must be withdrawn. Soffer. *op. cit.* p. 156.

with the question of what (*quid*) that substance is. In the case of a complete and simple thing, such as the mind prior to abstraction, to know this *to be* a substance is not to know the substance itself. A complete thing is "nothing more than a substance endowed with forms or attributes that are sufficient to let me know that it is a substance." [ibid.] But though this is also necessary for knowing *what* that thing is, it is not *sufficient* for that purpose. This is attained by a process of elimination in which those properties which could not possibly belong to the mind's essence are excluded, but those unknown attributes which are not thus disqualified are not excluded. [CSM III. 236] The cogito then should not be equated with:

a simple act of self-consciousness, of psychological origin, within the power of anybody whatever. It affirms only a *pure intellect*, an essence detached from everything that would mask it from natural consciousness, and which is affirmable as actual only insofar as it is perceived as the sine qua non condition of the possibility of all knowledge.²⁶

Nevertheless, as far as the explication of those unknown attributes which can be truly predicated of the transcendental ego, this was left unfolded; an instalment of *The Search After Truth* which has forever disappeared. The fullest investigation of the ego revealed by the successive reductions is the "enormous labour" of *constitutive* analysis, and since the phenomenology of self-constitution coincides with phenomenology as a whole [CM. 68], only this process will disclose "an entirely new realm of being".

The Transcendental Reduction and Its Policy of Eminent Domain

After the point of convergence in the isolation and anchorage of the cogito as the fulcrum from which to shift the natural standpoint, a second divergence has emerged in the description of the essential "nature" of the ego. For Descartes, this is a substance, a thinking thing, really distinct from the body to which it is wholly united. For Husserl, such a description pertains only to the empirical, mundane ego which participates in the spatio-temporal world and is governed by psycho-physical causal laws. This is *not* the domain which phenomenology investigates: to construe consciousness as another object in the world is to completely close off any feasible explanation for how it is possible for the world whole to appear to a subject. The true sense of the ego, in the formula "ego - cogito - cogitatum", will only be

²⁶ Gueroult. *op. cit.* vol. I, p. 34.

revealed through a further reduction, the transcendental epoche. "Descartes does not make clear to himself that the ego, his ego deprived of its worldly character through the epoche... cannot possibly turn up as subject matter in the world, since everything that is of the world derives its meaning precisely from these functions." [Crisis. 82]

In the "inexhaustible depths" of this entirely new domain of subjectivity, Descartes (allegedly) not only substituted the psychological ego for the ego cogito, but misunderstood the distinctive nature of the *cogitationes* thus disclosed. Phenomenological enquiry will shift the weight of evidence from the ego in ego cogito to the manifold of *cogitationes*. [CM. 31] This dual topic of ego/cogitata leads in two directions, each with a reciprocal influence on the other in terms of constitutive features uncovered by intentional analysis. Before pursuing our own line of enquiry on the first topic regarding discrepancies between Husserl's account of Descartes' ego and Descartes' own cautionary remarks on its potential misconstrual, let us examine the notion of "idea" as a separable delimited field of sense. For Husserl, turning to the cogitata qua cogitata is specifically the work of intentional analysis which discriminates the psychical 'object' as such (noema) and the psychical act or mode of the cogito (noesis). [CM. 36-7; Crisis. 170-2]

From the point of departure in the Cartesian cogito:

a hidden double meaning of Descartes' ideas will become evident: there arises two possible ways of taking these ideas, developing them, and setting scientific tasks; whereas for Descartes, only one of those was obvious from the start. Thus the sense of his presentations is factually (i.e. as his own sense) unambiguous... [Crisis. 78]

There is a twofold criticism here, only one aspect of which the *Crisis* elaborates: first, that Descartes does not distinguish *within* the notion of 'idea' between ideative act and its object; and second, the sense of 'idea' which he does work with is that of an 'image' or 'picture'. Husserl attributes one or both of these "superficial" notions to Descartes' "hidden, unclarified prejudice" in favour of the scholastic tradition. [CM. 24; Crisis. 75] Without doubt, this remark refers ultimately to Descartes' use of terms such as 'objective' and 'formal reality' of an idea; all too eager objections to this crypto-scholasticism were already familiar to him after the publication of the *Meditations*.

It is, however, rather alarming to read that (half of) the problem is an *unambiguous* misconstrual of the 'nature' of an idea when Descartes had explicitly warned the Reader on this point. "There is an ambiguity here in the word 'idea'. 'Idea' can be taken materially, as an operation of the intellect.... Alternatively, it can be taken objectively, as the thing represented by that operation." [CSM II. 7] Chapter 5 developed in some detail an interpretation of Cartesian 'idea' as being composed of two interdependent moments: the cognitive act and its purely immanent 'object'. His choice of scholastic terms may have been somewhat unhappy, but he is quite explicit about the meaning of 'objective' reality of an idea. "An idea is the thing which is thought insofar as it has 'objective' being in the intellect; ... 'objective' being simply means being in the intellect in the way in which 'objects' are normally there." [CSM II. 74]²⁷ Husserl's reading, however, is not so perverse as not to recognize that in Descartes' reflection on the cognitive mode in which the certainty of the ego stands forth, he has broached the notion of intentionality, though "to be sure, there is no question of a true presentation and treatment of the subject of intentionality." [Crisis. 83] Fair enough; no there isn't a genuine concept of intentionality, and analyses of the cogitata stop short of the point where they alone, in their self-givenness, would have provided an index of the sort of evidential certitude which consciousness alone requires. But is this enough to disqualify Cartesian 'ideas' as being a "hidden prejudice"?

The obverse side of this twofold criticism is that the univocal sense of Cartesian 'idea' is that of an 'image' or 'picture'. After summarizing the stages of methodical doubt in the First Meditation, via sense deception, madness and dreams, Husserl remarks:

Now here one says the senses deceive. That means, properly, the imagination which produces complex *images* out of the data of sensation, deceives us. Or, the *pictures* in our soul, as it were, do not portray actuality, they conform to no original, neither these complex imaginings, nor the simple elements, colours and other general sense data. All that belongs to myself, and to

²⁷ Compare Husserl's description of the being of the intentional object in consciousness, CM. 42; and Ideas I. 70, note 57. On Descartes' dual notion of idea, Gueroult remarks: "This way of characterizing the necessary nature of idea and correlatively the inclusive nature of its eventual cause, is in some measure phenomenological.... The definition of the principle of the correspondence of the idea with what is ideated is none other than a kind of phenomenological description of the idea." *op. cit.* vol. I, pp. 136-7.

the extent it is what I take it to be just as I sense it or as a complex *image*, I obviously do not deceive myself. [HUS VI. 402; emphasis added]

Descartes does indeed begin the process of doubt with common-sense notions (including the common-sense notion of 'idea!'), each of which is discovered to be susceptible to this purge. The reason for this is that such common-sense notions are all composite ideas. The cognitive power when conjoined with imagination (or memory) produces images or likenesses which, insofar as they are not simples, are liable to falsity. *That* there are intellectual 'ideas', e.g. number, magnitude, logical axioms, etc., may be called into doubt by the fiction of the evil genius; but if there are such 'ideas', then *what* they convey in a clear and distinct seeing cannot be false. The ideated number given in a numerical ideative act is adequately given itself; there is no ontological need for any sort of mediate representation. Descartes repeatedly distinguishes between the strict sense of 'idea' as that which is seized by the pure intellect alone and the loose sense of 'idea' as an image formed by composition in imagination, memory, etc. [CSM II. 113, 117, 273]

Although one may provisionally agree with Husserl's typification of ideas as images which succumb to universal doubt, he inadvertently identifies *his own* reading of the univocal Cartesian idea with Descartes' equivocal sense of idea. "The discussion about inner-psycho-geometrical and other images seem to yield the result that all a priori knowledge can primarily attain an apodicticity which has to do with images as inner-psycho events." [HUS VI. 404] If Descartes' notion of idea were entirely imagistic, then one consequence is that he would indeed be stranded with a spurious notion of transcendence (even if only a glimpse); no transcendent object could ever be given to consciousness by means of an image or picture. In the course of an otherwise balanced article, John Burkey never questions Husserl's construal of Descartes' ideas as images and says that, insofar as Descartes borrowed the terms 'objective' and 'formal reality' from the scholastics, "he insufferably compromises his radicalness"²⁸ -- and this is completely inaccurate.

We seem to have made a great conceptual leap forward -- from the universally doubted world, the world bracketed by the epoche, to the transcendental ego, the a priori condition for the possibility of

²⁸ John Burkey. *op. cit.* p. 24.

the world's appearance. These worldly appearances are now no longer considered merely as that which appears through the appearing, but that *towards which* anything must make its appearance: the world is a phenomenon *for me*. Only the thing gives itself, in some mode of presentation, but it is consciousness for which what appears is given. The Latin origin of *donare, donatio*, and its many cognates demanded an accusative and a dative 'object': one gives some *thing* to some *one*. This tripartite structure, ego - cogito - cogitatum, is one which Husserl traces from its original formulation in the Cartesian cogito.

Thus for Descartes, although the self-evidentiality of the cogito would indeed be apodictic in Husserl's sense, i.e. that it is impossible that it could be otherwise, this sort of evidentiality does not extend to any other ideas, even those seen clearly and distinctly. *That* some thing is clearly and distinctly perceived to be x, and that this x is known to have just this essential nature (e.g. the piece of wax), does not entail that *when* this x is not cognized in this manner, it could not now be otherwise. It only strictly entails that it *was* this x, presented in an adequate intuition which, if it becomes a link in a chain of reasons preserved in memory, has a derivative sort of certainty.

That the cogito has this ordinary certainty is one issue: the criterion of clarity and distinctness is inferred from the cognitive *mode* (not its 'object', which here is unique) of purely intellectual seeing in which the cogito is grasped; this *criterion* cannot itself be secured through transparency in its cognition, but is guaranteed by a transcendence, namely god. It is a gross error of interpretation, which invites the charge of circularity, to think that it is somehow divine veracity which underwrites (i.e. insures the insurer) the *content* of all intellectual insights, once the manner in which such insights are to be achieved has been demonstrated. For Descartes, one could say, the truth of god's essence, revealed through analysis of the ideas of infinity and perfection, and *then* god's existence as necessarily implied by this, are indeed apodictic -- it is not conceivable that he could be otherwise. This in both senses of the true nature of his being: that he could not *not be* (quod), and that he could not *be otherwise* (quid).

For Husserl to carry forward this second order security would be to bankrupt his enterprise, to remove the parenthesis from the thesis. God, as the phenomenologist might have said, is a transcendence which properly belongs to the domain of theological discussion. But as far as philosophical speculation, he belongs to the same sort (well, a peculiar sort) of spurious transcendence to which the thing-in-itself

belongs. One could say that God as a being who is independent, self-subsistent (and omnipotent, etc.) and not directly available to any *possible* experience (which excludes any *proof* by cause and effect, etc.) is a patent nonsense.²⁹ The transcendent god has already been bracketed by the first reduction and is as much a "faithful" (?) phenomenon as the world is an acceptance phenomenon. "The theological principle which might perhaps be rationally supposed could not be assumed as something transcendent in the sense in which the world is something transcendent for... that would involve a countersensical circularity" [Ideas I. 116] This would make the phenomenologist open to a charge of circularity in the way that Descartes was alleged to commit circular reasoning, though for a different purpose.

Since an entirely worldly god is evidently impossible and since god cannot be taken as being immanent in consciousness the way mental processes are, then there must be modes within the absolute stream of consciousness according to which transcendencies other than that of physical realities can be made known. It is not at all clear what such cognitive modes could be, nor what would be the kind of intuitions directed at god, nor what ordering and unitary rule such intuitions would have to conform to in order to implicate a divine transcendence. However, "the idea of god is a necessary *limiting concept* in epistemological considerations, and an indispensable *index* to the construction of certain limiting concepts which not even the philosophizing atheist can do without." [Ideas I. 187, note 17] Husserl thus "passes over" whatever could be considered as a rational *motive* for the postulation of a divine being. The phenomenological reduction is extended to include this absolute, transcendental being since the field proper to phenomenological investigation is pure consciousness. [ibid. 134]

But our discussion of Husserl's criticisms of the various stages in Descartes' initial disclosure of the purely subjective domain must remain faithful to a reconstruction of Descartes' own original insights, irrespective of the originality of phenomenological insights which they inspired. Husserl concurs in the

²⁹ "In general, a real or an ideal being that surpasses the totality of transcendental subjectivity is nonsense and is to be understood absolutely as such." HUS VII. 482. Despite Husserl's repeated denomination of such a concept as absurd, something to be stricken out, Herman Philipse interprets a passage at Ideas I, sec. 58 (quoted above) to mean virtually the opposite: "The contingent regular order in the sensations of transcendental consciousness, which enables it to constitute a world, is a rational ground for assuming the existence of a Divine Being beyond the world. Both for Husserl and for Berkeley, epistemology was the gate to rational theology and metaphysics." See his "Transcendental Idealism", in *Cambridge Companion to Husserl*. Ed. by Barry Smith & D. W. Smith. Cambridge, 1995. p. 287.

standard objection of circularity in the proof of god's existence: "Descartes loses his way here, in the attempt to demonstrate the right of evidence and its trans-subjective scope, in an early seen and much bemoaned circle. He infers *in the same way* the necessary existence of God from the last specific character of the human pure ego -- that God cannot deceive us within the criteria of evidence." [HUS VII. 65] Husserl takes this same position again fifteen years later: "He had not noticed the circle in which he was involved when he presupposed, in his proof of the existence of god, the possibility of inferences transcending the ego, when this possibility, after all, was supposed to be established only through this proof." [Crisis. 90; cf. CM. 82-3] Our citation of Husserl's critique has highlighted the phrase "in the same way"; for Descartes does *not* infer or demonstrate the criterion of evidence in clear and distinct seeing in the same fashion as the (first) proof of god's existence, and thence the essential guarantee of the non-transient holding true of insight into this criterion.

Charges of Circularity in Reasoning for the Existence of God and of Other Egos

We thus arrive at the fourth alleged divergence: that for Descartes there are two ultimate poles which secure certain knowledge of the material world, the cogito and god's infinitude and beneficence; that for Husserl, there is only one principle of principles, that which confers the genuine right of evidence. "Every originary presentive intuition is a legitimizing source of cognition, that everything originally offered to us in intuition is to be accepted simply as what it is presented as being, but also only within the limits in which it is presented there." [Ideas I. 44] We have no reservations about the profound and revolutionary consequences of this meta-theoretical statement, rather that Husserl himself, sometime later, was to grapple with a puzzle or paradox generated partly by the exclusiveness of this principle. There is one thing that seemingly cannot by its very essence be presented "only within the limits" -- and that is, other egos as self-contained subjects in the world.

Thus our query here has a twofold approach: can the charge of circularity against Descartes' argument for god's existence be legitimately sustained *beyond any reasonable doubt*? That is, is this objection against his position infected with a minimal element of doubt and thus should be rejected as another prejudice? And on the other front, to what extent does Husserl's own project eventually open his

position to a charge of circular reasoning, even if this also is just as much a misinterpretation and misreading sponsored by hidden prejudices?

Why is Descartes so brusque, for instance, in dismissing Arnauld's charge of reasoning in a circle? [CSM II. 150, 171] It is curious that he is at some pains to answer questions and elucidate problems posed by a thinker whom he much admired (that in itself, a rare occurrence), but on this issue, he simply says that he has adequately dealt with it elsewhere, in the Second Replies. [CSM II. 100-3] At this earlier passage, he refers to a distinction between the sort of evident insight attained in the momentary act (attentive regard) of clearly and distinctly seeing and the derivative certainty which attaches to the memory of those evidential insights.³⁰

If anything, a better indication of a possible answer to Arnauld occurs in the context of a reply about the "greater than ordinary certainty" with which the mind alone can be known. "We commonly judge that the *order* in which things are mutually related in our *perception of them* corresponds to the order in which they are related *in actual reality*"; but the process of doubt excludes this *thesis* insofar as he supposes himself to be ignorant of god. [CSM II. 159] Here is the key to unlock the circle: it is only at a certain point in the order of reasons (which is the only permissible method here) that the demonstration of god's existence from the essential truth of the 'objective' reality of ideas can legitimate a determinate relation *between* the order of reasons and the order of being. This is in contrast to what the proof does *not* do, that is, to retroactively justify a previous point in the chain of reasons, i.e. the criterion of certain evidence.

It is simply not within the scope of this chapter to rehearse the standard formulation of the circularity indictment nor the standard, if reluctant and regretful, acquiescence on the part of most commentators. There have been vigorous challenges mounted in Descartes' defence against this charge, most notably by Harry Frankfurt, Edwin Curley, and Martial Gueroult³¹ and we concur with Curley's provisional finding, that though Descartes' project for a defence of reason and a foundation for the

³⁰ This accords well with features of the two principal operations of the intellect, intuition and deduction, in Rule III of the *Rules*.

³¹ Harry Frankfurt. *Demons, Dreamers and Madmen*. Bobbs-Merill, 1970. pp. 170-80; Edwin Curley. *Descartes Against the Skeptics*. Blackwell, 1978. pp. 96-124; Martial Gueroult. *op. cit.* vol. I, pp. 167-74.

sciences may not eventually succeed, this is not because his reasoning is circular but because his arguments for god's existence are just not good enough. However, we concur with this assessment on the basis of different, though compatible, analyses which have their framework within two intersecting orders.

[These are] the reciprocal independence of the series of the cogito and the series of god and their criss-crossing at a given point. We encounter a nature that reveals itself to our intuition as a foundation finding a point of support in itself, and not in us, imposing itself on me, *in spite of myself*, irresistibly testifying about its objective validity by getting me to touch the Other directly within myself.³²

Let us recapture one of our guiding Cartesian motifs: the cogito is first in the order of reasons, revealed in a self-evident and transparent intuition; God is first in the order of being, whose *idea* is demonstrated as the necessary formal cause of the 'objective' reality of the ideas of infinity and perfection. The relation between these two orders, having been suspended through universal epoche, is now re-established through the criterion of clear and distinct seeing as that of the correspondence between idea and ideated, foremost in the case of the idea of God and of God himself. And what is the status of the world as such after the phenomenological epoche has rendered it merely the intentional correlate of any possible consciousness? "The sense commonly expressed in speaking of being is reversed. The being which is first for us is second in itself; i.e. it is what it is only in relation to the first. But it is not as though there were a blind regularity such that the *ordo et connexio rerum* necessarily conformed to the *ordo et connexio idearum*." [Ideas I. 112] The exemplary resonance with Descartes' dual priority according to the order of reasons and the order of beings finds an even more striking echo in the last pages of the full text of the *Crisis*, twenty-five years later: "In respect of knowledge, for us men, our own being goes before that of the world; but this does not mean that this same thing holds in respect to the actuality of being". This last clause the editor/translator expands as: "man's objective being (as subject in the world) comes first in the order of knowing but not in the order of being." [Crisis. 262, note 6] Husserl then goes on to re-iterate that the process of reaching this domain is achieved through

³² Gueroult. *op. cit.* vol. I, p. 170.

bracketing all worldly beliefs and remarks that consciousness is "a strictly self-contained domain, yet without any boundaries separating it from other regions. For anything which could limit it would have to share a community of essence with it."

This passage is from *Ideas: First Book* which famously devotes little attention to what would later become an extremely important theme. One could make a "conceptual leap" from the above point to the final page of the *Cartesian Meditations*: "The intrinsically first being, the being that precedes and bears every worldly objectivity, is transcendental *inter*-subjectivity: the universe of monads, which effects its *communion* in various forms." [CM. 156] Although it is only in this later period that his published writings show him grappling with the issue of intersubjectivity, it is now known that he had been working with this incipient problem as early as 1905.³³, roughly the same time as the inception of the phenomenological epoche itself. Simply stated, how is it possible that within this absolute domain, this "island of consciousness", into which nothing can penetrate, other egos as *subjects* of their own objectivating acts can be constituted? Not, how can they be represented or pictured as thinking beings, but intuitively *given* in the originary sense. It seems that rigorously pursued to its limits, transcendental phenomenology leads inescapably to an intractable solipsism. [CM. 89]

It is to Husserl's immense credit that what is first proposed as an objection from *outside* phenomenology is transformed into an essential problematic *within* phenomenological investigation. His extraordinary arguments to dissolve this "illusion" or to resolve this "paradox"³⁴ receive detailed exposition in the Fifth *Cartesian Meditation*. As above with Descartes' alleged circle and its potential refutation, so here, it is not to our purpose to trace the complex lines of thoughts which lead to this illusion, nor those which dispel it.³⁵ Rather it is to indicate that one purported divergence has collapsed under the weight of convergent requirements.

³³ Bernet, Kern & Marbach. *op. cit.* pp. 154-5.

³⁴ In *First Philosophy* he claims that he has not argued in a circle, HUS VIII. 69-71; see Ludwig Landgrebe. "Husserl's Departure from Cartesianism", in *The Phenomenology of Husserl*. Ed. by R.O. Elveton. Chicago: Quadrangle, 1970. pp. 274-6.

³⁵ For detailed exposition of this immense problem in Husserl's later work, see especially, Michael Theunissen. "The Original Transcendental Project of Social Ontology: Husserl's Theory of Intersubjectivity" in *The Other*. trans. by Christopher Macann. MIT Press, 1984. pp. 13-163; and Alfred Schutz. "The Problem of Transcendental Intersubjectivity in Husserl." in *Collected Papers*. The Hague: M. Nijhoff, 1966. vol. III, pp. 51-91. In his response to Eugen Fink's comments, Schutz observes that,

Whereas Descartes transcends the cogito by means of God, Husserl transcends the ego by the alter ego.... One may wonder whether Husserl escaped what might be called the "Husserlian circle" any better than Descartes escaped his own famous "circle". In the same way that Descartes can be criticized for basing all truth on the divine truth and this on the idea of infinity, we may question whether Husserl succeeded in getting the originary ego, in which the alter ego is constituted, back "into" intersubjectivity.³⁶

We have not yet quite succeeded in extricating our analyses from the labyrinth of the many-named reductions. Due partly to Husserl's own use of phrases like "stepwise" and "graded" or "layered" reductions, it may seem that these are performed *within* one another -- a steady, relentless etiolation of the point of departure until it winks out, like a once luminous point-source. C. W. Harvey's clever metaphor of branches, in something like a decision tree, makes their inter-relation much clearer. Differentiated acts of epoche are used to suspend judgements and beliefs based upon separate regions of knowledge, e.g. material objects, linguistic states-of-affairs, the formal sciences, etc. A layered or graded reduction would take place within a branched act of epoche and therein proceed deeper into the constitutive origins of that region.³⁷

This is perhaps most obviously the case with the eidetic reduction, whose subject matter Husserl takes to be the *science* aimed at by the entire phenomenological method. That is, just as there are empirical sciences of matters of fact, so there are eidetic sciences of a priori truths. The first reduction which brackets the general thesis of the objective being of the 'external' world reveals only momentary *particulars*, "a ceaseless flux of never-returning phenomena", "a realm of a Heraclitean flux". [CM. 49; Ideas I. 168] The transcendental reduction has uncovered the absolute ground for the possibility of knowledge in the genetic priority of transcendental consciousness. The world of the former natural

"Husserl's failure to find a solution to this problem is due to his attempt to interpret the *ontological* status of social reality within the lifeworld as the constituted product of the transcendental subject, rather than explicating its transcendental *sense* in terms of operations of consciousness of the transcendental subject." *ibid*, p. 87.

³⁶ Paul Ricoeur. *op. cit.* pp. 84-5; see also Thevanez. *op. cit.* p. 108: "The Cartesian ego becomes conscious of its lack of being, of its finitude, of its dependence on the infinite being, which in the *ordo cognoscendi* comes afterwards, but which is nevertheless more primary in the *ordo essendi*. Husserl's transcendental ego more and more acknowledges that it is secondary with respect to the contingent facticity of the *Lebenswelt*, that is to say, of the non-reflexive on the pre-reflexive."

³⁷ C. W. Harvey. *op. cit.* pp. 106-7.

attitude is transcendent to any consciousness, but it is still the *one* world, the actual world now deprived of its actuality-character. Over against every empirical science of actualities lies an a priori science of possibilities: the former is concerned with valid laws of nature which express factual regularities, each of which could be different; the latter is concerned with ideal laws which express universal states of affairs that could not be otherwise, i.e. the necessity which pertains to apodictic evidence.

The institution of a priori sciences is accomplished through the eidetic reduction which proceeds in several stages, the formulation of which Husserl returned to again and again. [Ideas I. 156-61; EJ. 340-8; CM. 69-72] We will put off detailed exposition of this topic since it forms the main part of a later chapter on "Intuition and Seeing of Essences"; however, a brief overview is called for. For every given intentional 'object', this appearing thing here and now, presenting first one and then other sides, there attaches a horizon of determinate other sides not yet given, but which are co-positing as possibilities. Some other as yet unspecified aspects cannot be given in further perceptions if this thing is to remain just this and not some other thing. For instance, having seen five square, flat sides of a cube, if the sixth side turns out to be circular and bulbous, the original 'object' was not a cube after all. What is it about the *essence* of a cube that allows one *in advance* to extend the co-positing of other sides in just that determinate manner, such that some eventualities are fulfillments and others are frustrations?

Through the technique of free variation in phantasy, the universal kind is able to be actively seen as the pervasively identical or invariable *x* which is found in every particular when it is construed solely as a *possibility* -- though here this one possibility is the actual thing. One can then "run-through" the particular variables and discern the *en epi pollon* (one in many), such that this perceived thing is then the mere exemplification of the *eidōs* or essence. "What can be varied... bears in itself a necessary structure, an *eidōs*, and therewith *necessary laws* which determine what must necessarily belong to an object in order that it can be an object of *this kind*." [EJ. 352] The essential truths given through these laws are called a priori by reason of the type of validity which they govern: they precede all factual occurrences, that is, everything arising from experience. Every experienced actuality is subject to the unconditional proviso that it must conform to the a priori conditions of possible experience and cognitions directed towards such experience.

The one formal discipline to which Husserl here explicitly appealed was mathematics, especially geometry because it dealt with essences of shape and volume. Mathematical cognition was one of eidetic insight: the 'eidos' triangle was seized or grasped as the invariant 'object' which remained unchanged in any imagined triangle. Husserl described the advent of such a pure mathesis in Galilean (and Cartesian) physics through the application of a geometry of nature. "The possibility emerges of producing constructively and univocally, through an a priori, all-encompassing systematic method, all possibly conceivable ideal shapes." [Crisis. 27] -- in other words, a pure eidetics. In the 17th century, for the first time, lies the foundation for "the sure prospect of an infinity of truths for one of the great regions of experience, truths that are valid in unconditional necessity for everything of this region that is experienceable." [Ideas III. 37]

How far are we now, at the end of an exposition of Husserl's reductions, from Descartes' conception of the goals of his own project? Husserl says that he has been guided by the idea of philosophy as an all-embracing science, which he now realizes must be grounded in an eidetic discipline in order for the actualization of first philosophy to take place. [CM. 72] Descartes asserts in the "Preface to the Reader" that the *Meditations* will deal with "the foundations of first philosophy in its entirety", and that the only order which could be followed to achieve this is that of the "geometrical style" [CSM II. 8], i.e. the order of reasons. Wherein consists the peculiar character of this order of reasons?

The true way by means of which the thing in question was discovered methodically and as it were a priori, so that if the reader is willing to follow it and give sufficient attention to all points, he will make the thing his own and understand it just as perfectly as if he had discovered it for himself. [CSM II. 110]

Surely the primary notions employed by geometers are clear and distinct enough that no further demonstration is needed to convince one of the truths asserted, provided one correctly follows the rules of inference. In metaphysics, however, such is not the case and great effort is needed to reach this level of evidence in the understanding of primary notions. "Admittedly they are *by their nature* [=essence] as evident as, or even *more evident than*, the primary notions which geometers study." [ibid. 111] But these

primary notions are often in conflict with preconceived opinions derived from the senses which cloud our mind and render things obscure.

Here then is Descartes' motivation for methodical doubt and the suspension of all beliefs: to clear the ground and demonstrate the necessary conditions for the clarity and distinctness of any intellectual cognition (of simple truths) to be shown to attain at least as much self-evidential certainty as the 'objects' of mathematical intuition. This attainment of a criterial objective goes a long way towards fulfilling Descartes' initial vision of an all-embracing general science, "which explains all the points that can be raised concerning order and measure irrespective of the subject matter and this science should be termed *mathesis universalis*... for it covers everything that entitles *those other sciences* to be called branches of mathematics." [(Rule IV) CSM I. 19]

In summary, the Cartesian point of departure is a way into phenomenology because for the first time the purely subjective domain of the knowing subject is thematized as the ground for investigation of what can count as certain knowledge. In stark contrast to the mediaeval schoolmen, Descartes is not in search of some *theory* of correspondence or resemblance between appearances and an underlying reality. The very notion that there is such a theory is an unexamined assumption and any candidate for such a theory can always be called into question by skeptical doubt. Descartes' method of universal doubt employed as a fiction revealed the presumptive nature of theory construction and showed that the only feasible candidate for a criterion of evidence was the clarity and distinctness in which the cogito disclosed itself. Husserl's principle of principles regarding the originary self-givenness of all presentative intuitions is a radicalization and extension of this Cartesian criterion within the phenomenological reduced sphere of consciousness. The various stages of the reduction revolve around an entirely *unnatural* suspension of the natural attitude, which saturates all philosophical activity, and must be renewed again and again. In this process, the transcendental ego is shown to be the necessary condition for the possibility of the world-whole and worldly things to appear.

The first divergence between Descartes and Husserl pertains to their attitudes to science: where the former accepts the mathematical model of the natural sciences as one that philosophy should emulate, the latter brackets the natural-scientific model as another knowledge construction founded on the natural

thesis of the world's being. The second divergence pertains to the nature of the self: where the former identifies the ego as *res cogitans*, a thinking thing within a world of things, the latter argues that the empirical ego is subtended by the transcendental ego. But a misreading on Husserl's part fails to show that, for Descartes, the *idea* of the ego is indeed an abstraction, modally distinct from the mind as substance, and as such there is a glimpse, though unexplicated, of the transcendental ego. The third alleged divergence regarded the 'being' of an idea: for Descartes, the formal/objective reality of an idea comprised an intentional structure between act and content; for Husserl, an idea is the intentional correlate of all cognitive acts, an irreal component of consciousness.

This alleged discrepancy conceals a convergence, since Husserl's criticisms that Cartesian ideas are univocal and unambiguous and that they are images or pictures are simply inaccurate. The fourth divergence regarding the dual poles from which a chain of reasons can establish a fulcral point for the demonstration of evidential knowledge also conceals a parallel. As much as Descartes is guilty or not of circularity in arguing from god as first truth in the order of being and the cogito as first in the order of reasons, so Husserl is committed to arguing from the transcendental ego to the essential structures of the lifeworld, within which other ego-subjects are either objects constituted by the one originary ego or subjects which bestow the sense of ego-ness as one among many. The final congruity is to be found in their respective notions of the universal science which can be built on these foundations: for Descartes, his metaphysics are the surest guarantee of the validity of theoretical physics; and for Husserl, the eidetic reduction leads to an a priori science of essences.

There is a standard line of interpretation on Descartes' main concerns, a line which still holds sway, coloured by undisclosed "hidden longings" within the post-Cartesian tradition. So also there is a standard line of interpretation regarding Husserl's "Descartes"; not about his avowed point of departure in Descartes' attempt to doubt, but about all those Cartesian claims which Husserl allegedly departed from. Husserl remarked that Descartes had remained too true to the original skeptical impetus and not radical enough in his overthrow of that position. It is hoped that our research has shown that Husserl remained far truer to Cartesianism, precisely in those places where the influence is inexplicit, and less radical than a faithful reading of Descartes' project according to the order of reasons would reveal. This

last comment readily acknowledges that Descartes is often silent, or at best highly cryptic, at those places where a truly radical investigation could have extended. Nevertheless, many commentators "fill in the blanks" with very dubious estimates which are often unsupported and sometimes contradicted by Descartes' own assertions.

It would never be sufficient for a proper understanding of the phenomenological reduction to show that it was improperly founded on a mistaken Cartesian *epoché*³⁸. The meaning-realm which the reduction discloses would still retain all of its objective validity irrespective of its aetiology. On the other hand, any demonstration that a reduction can be securely anchored on a rightly understood Cartesian *metaphysical doubt* would do nothing to further its own ambition anyway. This then is the principal reason why Husserl abandons the Cartesian way into phenomenology, without derogating the revolutionary character of Descartes' original insight. Instead it has hopefully been shown that it is due to Husserl's letting slip from his grasp the genuine sense of Descartes' method that the reduction itself is permitted, even encouraged.

³⁸ "The precise nature of Husserl's neo-Cartesianism is thus hard to specify. To the extent that Husserl's view of his relation to Descartes is correct, his claim as a neo-Cartesian depends upon the distinction between motif and doctrine. To the extent that his view of the relation is incorrect.... Husserl's claim can be ironically supported in some measure." Walter Soffer. *op. cit.* p. 157.

CHAPTER 7

INTUITION AS SEEING WITH THE MIND'S EYE

Since the demise of Neo-Kantianism in the late 19th Century, the concept of intuition has gone out of favour amongst western philosophers, but for the wrong reasons. If those who objected to its use in philosophical discourse, for example by Henri Bergson, had been correct in identifying to what they imagined intuition to refer, then perhaps they would have been justified in jettisoning the concept itself. However, a wide-ranging implication of the present research is that such critiques, for the most part formulated by early proponents of the language-analytic model, incorrectly equated intuition with a mysterious, ineffable mental faculty -- a sort of 'sixth sense' super-added to the other five -- and hence brought a rich and complex terminological development to a premature closure. Aside from the avowedly Kant-influenced Ernst Cassirer in *Philosophy of Symbolic Forms* (1923-29), the last great exponent of a systematic philosophical project which relies centrally on the original significance of intuition is Edmund Husserl.

But there have been other philosophical enterprises which relied on the same basic *notion* of what it means to have unmediated knowledge of something, though expressed in a more acceptable terminology. A strong case has been put forward recently by, amongst others, J. Hintikka, C. O. Hill, and D. W. Smith,¹ that Russell's notion of *acquaintance* is parallel to Husserl's notion of intuition; authentic presentation to knowledge by acquaintance, and inauthentic presentation to knowledge by description.² Hintikka also observes that Russell's 1913 work *Theory of Knowledge* (held back due to Wittgenstein's criticisms and not published until 1984) advances an "excellent counterpart to Husserl's categorial intuition" -- acquaintance of *logical forms*. "The upshot would have been to turn Russell's

¹ Jaako Hintikka. "The Phenomenological Dimension", in Smith & Smith. *op. cit.* pp. 93-7; Claire Ortiz Hill. *Word and Object in Husserl, Frege and Russell*. Ohio Univ. Press, 1991. pp. 62-7; D. W. Smith. *The Circle of Acquaintance*. Kluwer, 1989. pp. 20-7.

² In light of Schlick's general antipathy to phenomenology, it is ironic that he correctly equates intuition with acquaintance, and conceptual knowledge with understanding, commending Russell's notion, and then *incorrectly* asserts that phenomenology conflates these two functions. Moritz Schlick. *General Theory of Knowledge*. trans. by A. E. Blumberg. Springer-Verlag, 1974. p. 83.

work in logic and in the foundations of mathematics into a counterpart of Husserl's enterprise of phenomenological reduction... in the realm of essences."

C. O. Hill astutely observes³ that what Russell and other early analytic philosophers found objectionable about Husserl's early work was what *they took to be* the meaning of the term *Vorstellung*, usually translated 'idea'. Since there was already a sympathetic reception for Frege's theories, and since Frege disparaged *Vorstellung* (in one sense) as an entirely subjective, dispensable aspect of consciousness, governed by the psychological laws of association, Russell and others were inherently suspicious of any account of conscious knowing which accorded primacy to 'ideas'. Husserl's account, as early as *The Philosophy of Arithmetic*, granted just such epistemic primacy to *Vorstellung*, but he meant something much different than what Frege took him to mean. To further complicate matters, Frege had discriminated an objective sense to *Vorstellung*, with respect to the logical, non-sensible aspect, but abandoned it in favour of 'object' and 'concept'. It would take us too far afield to trace the complex interplay of accusation and counter-accusation between these three logicians. Suffice it to say that Russell credited Brentano with an important influence on his own work in theory of knowledge and may have been more receptive to Husserl's work if not for this disastrous misidentification.

D. W. Smith has developed an intriguing theoretical model of acquaintance from a brief earlier sketch in his work with R. McIntyre.⁴ This earlier work isolated one of the most significant omissions from Husserl's basic theory of intentionality: determination of the perceptual 'object' cannot depend on analysis of the *noematic sinn* alone. What Husserl's account lacks is some sort of frame for *contextual* influences, indices which make reference to the perceiver and the object in his/her perceptual environs. Smith and McIntyre propose a *pragmatics* of intentionality to complement an expanded version of Husserlian semantics: this is what Smith provides in *The Circle of Acquaintance*. Let us here synopsise Smith's basic theorems⁵, since as we shall see in the unfolding of both Descartes' and Husserl's notions

³ C. O. Hill. *op. cit.* pp. 67-70.

⁴ D. W. Smith & R. McIntyre. *Husserl and Intentionality*. D. Reidel, 1982. pp. 363-9.

⁵ D. W. Smith. *op. cit.* pp. 28-30.

of intuition, the skeleton of Smith's model can serve as a useful template with which to keep track of a highly diverse *dual set* of terms, each of which undergoes correction and revision.

1. *Acquainting* experiences or awareness include: a. perception of physical objects (events); b. inner awareness, in consciousness, of one self and of one's experiences; c. empathic perception of others as persons.
2. A person is *acquainted* with an object if and only if he or she is having an *acquainting* experience of, or intentionally related to, the object.
3. An *acquainting* experience is a *self-evident cognitive* experience.
4. An *acquainting* experience or awareness is an *indexical* presentation or awareness, e.g. of 'this' or 'you' or 'I'.
5. Acquaintance is an *indexical* intentional relation, i.e. ... to an object in the subject's *presence*, or in *contextual relation* to the *acquainting* experience.

As with a number of other central concepts in late scholasticism, such as the theory of ideas, the notion of intuition undergoes a profound change in Descartes' hands. The extent of this change is not so obvious in his early work in the *Rules* but definitely signals a departure in its later revision as clear and distinct seeing in the *Meditations*. Here intuition takes on a richer and more complex role in his account of the achievement of certain knowledge. This enrichment is in large part due to overcoming problems in the physiology of perception at various stages, from the *Rules* to *The World* and then to the *Optics*. In the *Discourse*, Descartes explicitly warns the reader about his novel use of the term 'intuition' and that he shall be obliged to give it a different meaning than the ordinary one. This is a proviso which the text would also have benefited from including in its introduction of radical new meanings for the terms 'formal' and 'objective' reality of an idea in the Third Meditation, given the baffled misinterpretations to which these latter terms were prone.

What is it that intuition is directed towards? Rule III states that there are only two "actions of the intellect" by means of which one is able to attain indubitable knowledge: intuition and deduction.

By intuition I do not mean [a] the fluctuating testimony of the senses or [b] the deceptive judgement of the imagination as it botches things together, but [c] the conception of a clear and attentive mind, which is so easy and distinct that there can be no room for doubt about what we are understanding.... Intuition is [d] the indubitable conception of a clear and attentive mind which proceeds solely from the light of reason.... Thus everyone can mentally intuit [e] that he exists, that he is thinking, that a triangle is bounded by just three lines, and a sphere by a single surface, and the like. [CSM I. 14]

This is a highly compact and elliptical passage, the *locus classicus* for the Cartesian definition of intuition and also the germ for many fruitful notions in the *Meditations*. Descartes is concerned to eliminate sensory perception (a) and imagination (b) from contention as eligible sources for indubitable knowledge. The rationale for excluding (a) and (b) is not provided until Theorem 5 of the first part of Rule XII. [ibid. I. 42] There we learn that the 'cognitive power' through which we know anything in the strict sense is "purely spiritual". When conjoined with 'figures' supplied by the sense organs, it produces sensory perceptions in the mind. When conjoined with retained or invented images, it produces remembered or imagined thoughts. Only when this power acts on its own is the mind properly said to understand. This is comparable to the description of the operation of the pure intellect in the piece of wax exercise in the Second Meditation.

The first positive indication of the meaning of intuition is in (c) which characterises it as a conception (in the broadest sense) of "a clear and attentive mind", of which the intuited content is "easy and distinct", such that the intellectual operation excludes minimal doubt. Readers of the *Meditations* will be predisposed to regard "clear and distinct" as binomial terms which unequivocally qualify seeing as certain cognition; here they have not yet taken on their more precise later signification. However, "attentive" is a common term in the *Rules* and should not be construed exclusively as pertaining to the psychological state of mind of the subject. As Chapter 5 showed, attention is in fact the final phase in the process of methodical doubt, and as such "attentive", though admittedly ambiguous, pertains to the epistemic status of the knower.

The term "easy" is not so simple to explicate; one can hazard the speculation that it refers to the direct (i.e. unmediated) access to the intuited 'object'. Where (d) seems to be a mere periphrasis of the

former, it is more of an alternative formulation since it interpolates a new partial definiens in the second clause. Where the minimal doubt condition in (c) was used to qualify intuition as an indubitable conception, we now have the (so far) mysterious phrase, "which proceeds solely from the light of reason". Finally the author provides some examples of intuition in (e): note well at this point that the instances cited pertain to a subject's mental states or to math/geometrical 'objects' and that they are all propositional, i.e. *that* a state of affairs obtains. But what can the inclusion of the phrase "the light of reason" add to our understanding of the operation of the intellect?

"The light of reason", or "the natural light", is a recurrent motif throughout Descartes' writings, from the *Rules* to *The Passions of the Soul*. Perhaps its most obvious import is to provide Descartes with a legitimating *source* for the presence of a faculty of certain intuition in every human being -- this source is God-given. In a Letter to Mersenne of 1639, regarding the natural instinct towards bodily preservation and the purely intellectual instinct, he explicitly *equates* the natural light and mental vision. [ibid. III. 140] In his Replies to Hobbes, he states that "a light in the intellect means transparent clarity of cognition" [ibid. II. 135], a notion which he had expanded on earlier in the Second Replies. Here he says that we must distinguish between the thing itself which we assent to, and the formal reason which induces the will to give its assent. It is only in respect of the formal reason that transparent clarity is required, and this comes from one of two sources, the natural light or divine grace. [ibid. II. 105] In *Principles* I. 30, these several strands of thought come together: "The light of nature, *or the faculty of knowledge* which God gave us can never encompass any object which is not true insofar as it is indeed encompassed by this faculty, that is, insofar as it is clearly and distinctly perceived." [ibid. I. 203]

Thus it is no surprise that after the caution about using Latin words with a novel meaning (a strictly parenthetical remark), he continues from "and the like" to connect intuition with deduction. "The self-evidence and certainty of intuition is required not only for apprehending *single propositions*, but also for any train of reasoning whatever." The example which he adduces is the identity of the sum of two arithmetical operations, each of which has to be intuited with certainty and then the necessary equivalence of the two intuitions also intuited with certainty. There follows this definition of Cartesian deduction:

The inference of something as following necessarily from some other propositions which are known with certainty.... Very many facts which are not self-evident are known with certainty, provided they are inferred from true and known principles through a continuous and uninterrupted movement of thought in which each individual proposition is clearly intuited.... Hence we are distinguishing mental intuition from certain deduction on the grounds that we are aware of a movement or a sort of sequence in the latter but not in the former and also because immediate self-evidence is not required for deduction as it is for intuition; deduction in a sense gets its certainty from memory. [CSM I. 15]

We have briefly touched upon the relation of intuition and deduction in Chapter 4 in connection with Descartes' attempt to resolve the problem of how the certainty which attaches to discrete cognitions can be maintained across "a continuous movement of thought". In the demonstration of a mathematical postulate, one first grasps the truth of one premiss in an adequate intuition and then proceeds to the next premiss, which is also secured in this manner, and so forth. Although the relational necessity between these premisses must also be intuited, the mind's holding-in-grasp of the certainty of these premisses is not itself an act of immediate (i.e. direct) cognition. The epistemic condition of having established an inference in a demonstration depends on another mental faculty (memory) which is open to fallibility in ways in which the intellect is not. This is why he says that "deduction *in a sense* gets its certainty from memory". Is it possible to eliminate memory's inherent fallibility in moving from cognition to cognition, i.e. giving up its grasp on the secure intuition of a single proposition?

Strictly speaking, this proviso attached to deduction is misleading and inaccurate, due perhaps to the uneven strata of composition.⁶ Rule VII is devoted to an exposition of the concept of enumeration and Rule IX takes up a more specific definition of deduction and its attendant intuitions based on deduction's discrimination from enumeration of which it is said that "*its* certainty in a sense depends on memory". [ibid I. 37] Some of the argumentative problems which are alleged to emerge when one considers this pseudo-certainty of memory as derivative of *deduction* disappear when it is recalibrated in terms of *enumeration*. An enumeration of either all the links in a chain of reasons *or* all the members of a

⁶ John Schuster. "Descartes' Mathesis Universalis" in *Descartes' Phil. Math. & Physics*. Steven Gaukroger (Ed.) Harvester Press, 1980. pp. 40-2.

given class must be sufficient, but need not be complete or distinct. It must be sufficient insofar as it determines all the possible instances which fall under the topic (or concept).

It is worth pursuing Descartes' discussion of deduction since it leads directly to two rules which elucidate characteristic features of those things which are intuited with certainty and self-evidence. The summary of Rule V states that the whole method consists in the right ordering and arranging of those objects upon which our 'mind's eye' (intellect) must focus its *attention*. This order is followed if one first reduces complicated and obscure propositions step by step to simpler ones, and then starting with the *intuition of the simplest ones*, ascends through the same steps to knowledge of the rest, i.e. the original complex propositions and their corollaries. Rule VI states that in order to distinguish the simple from the complex and to arrange them in an orderly manner, one should *attend* to what is most simple in each series of things (i.e. chain of reasons) in which some truths have been directly deduced from others. Then one should observe how other truths are more or less or equally removed from these simplest truths. Descartes says that "this is the main secret of my method; and there is no more useful rule in this whole treatise." [ibid I. 20-1]

The young Descartes is convinced that the "seeds of truth" contained in math-geometrical propositions are also concealed in other related disciplines, that there is a unified science (*mathesis universalis*) for which these exemplary propositions are more "its outer garments than its inner parts". Rules V through XII are an elucidation of the systematic structure of these "inner parts" and the concomitant technique for extending analysis beyond the ordinary mathematical operations. The initial development of this unified science reached its culmination in the second half of Rule XII with the formal-ontological schema of simple and complex natures. The meaning of a simple nature is central to an understanding of what constitutes the proper 'object' of an intuition.

"The secret of the technique consists entirely in our *attentively* noting in all things that which is absolute in the highest degree." Some thing is called "absolute" if it contains "a pure and simple nature" - in other words, if it is the basis upon which other things are known in a deductive sequence, and no other thing can be the basis for it. For some thing to be the epistemic basis for another thing does not pertain to mathematical simples alone. Though the type of inference which allows for the clarification of

founding relations between relative levels of simple natures is different for *abstract* simples than for *material* simples, the latter type of 'inference' is possible through the process of elimination. Lest it seem that physical objects have been excluded from the field of intuitive contents, he refers to this in Rule VI, well before its detailed unpacking in Theorem D2 of the second part of Rule XII.⁷

"There are very few pure and simple natures which we can intuit straight off and per se (independently of any others) either in our sensory experience or by means of a light innate within us." [ibid. I. 22] However, the concept of intuition endorsed by the *Rules* excludes material composites, i.e. middle-sized physical things, since the *intellectual* process which decomposes them is liable to 'lose track of' the *ordered* arrangement of intuited material simples. Such a decomposition of a sequence of abstract simples in an inference is not thus corrigible since the ordered structures between these simples are themselves open to intuition as necessary relations.

Some scholars have objected to what they see as a latent confusion in Descartes' description of the subject's condition vis-a-vis intuition and deduction. The objection is that Descartes conflates the *psychological* conditions under which intuition can take place with the *epistemic* conditions without which no intuition can take place. The use of phrases such as "the sharp edge of the mind", "careful concentration", the cultivation of "good study habits", and so forth, would decidedly lend themselves to such an interpretation. However, in Rule IX he discusses "two special mental faculties" which are indeed acquired skills and open to contingent circumstances. "Perspicacity in the distinct intuition of particular things and discernment in the methodical deduction of one thing from another." [ibid. I. 33] It is through practice in these two *skills* that one becomes adept at employing the two principal *operations* of the understanding.⁸ If anything it is his cavalier use of the term 'faculty' which leads to some problems of exegesis; whereas it does make sense to speak of cultivating a faculty such that it improves success at a cognitive operation (or function), it doesn't make sense to speak of a gradient in the function itself -- either intuition reaches its 'object' or it doesn't.

⁷ For a complete synopsis of the eight theorems D1 - D8 of simple and complex natures in Rule XII, see Chapter 4.

⁸ This interpretation of perspicacity and discernment as practical techniques which are distinct from, but correlated with, the two cognitive operations is supported by M. Gueroult. *op. cit.* vol. I, pp. 59-60.

Perhaps the summary of Rule XI can also be understood as addressing the practical concerns of these two faculties taken together. "*It is useful* to run through them [simple propositions] in a continuous and completely uninterrupted train of thought, to reflect on their relations to one another, and to form a distinct and, as far as possible, simultaneous conception of several of them." [ibid. I. 37] The postulation of a sort of *synchronous cognition* is an attempt to avoid the problem of derivative certainty connected with the memory's holding-in-grasp of intuited truths. In order for deductive inferences to qualify as certain, though not self-evident, 'objects' of knowledge they must "present themselves simultaneously". This may seem an insuperable criterion for what is a *sequence* of inter-connected links in a chain. But he points out that one does not have to examine every link in a chain in order to know *with certainty* that they are all connected -- hold the chain up, so to speak, and if it doesn't fall apart, it must be securely inter-linked. Descartes' answer as to how a synchronous run-through of discrete intuitions and their necessary relations is possible is ingenious; it is via "abbreviated representations", e.g. astronomers' imaginary circles. As discussed in detail in Chapter 4, this is the symbolic ground-work for his invention of algebraic geometry and parallels Husserl's insight into the gestalt-figural 'objects' of supra-sensuous numerical cognition.

One of Richard Rorty's criticisms⁹ of the Cartesian concept of intuition is that Descartes attributes intuition to a separable mental *faculty* to which one must have some sort of special access. Granted that Descartes does speak sometimes of intuition in this manner, but as part of his *enumeration* of the notion of human knowledge. He signals the end of this enumeration at the start of Rule XII with the phrases "complete enumeration" and "sufficient explan[ation]". [ibid I. 39-40] After this, it is possible to discuss what an adequate *intuition* of the concept of intuition itself would be. In this context, he speaks of one single power (*vis cognitiva*) which conjoined with various types of corporeal images yields four *functions*. These are discriminable through a continuous movement of thought as being intimately implied by each other just as much as several geometrical properties of a triangle are ascertainable via an adequate intuition of the concept 'triangle'. Descartes' perspicacious and discerning

⁹ Richard Rorty. "Intuition", in Paul Edwards, Ed. *Encyclopedia of Philosophy*. Macmillan, 1967. vol. 4, p. 208.

study of the nature of human intelligence, which includes its division into four faculties, has placed him in a better position to have a certain and self-evident grasp of the meaning of 'intuition'.

The first five remarks of Rule XII are devoted to knowledge of things considered from the point of view of the knowing subject.¹⁰ The second eight theorems are directed towards the possible 'objects' of knowledge and are designed to answer these questions: "What presents itself to us spontaneously? How can one thing be known on the basis of something else? What conclusions can be drawn from each of these?" These queries are not answered until the very end of Rule XII, with the passage which opens, "a problem is to be counted as perfectly understood only if we have a *distinct perception* of these three points." [ibid. I. 55]

Note that a complete analysis of the enumeration of the current field of investigation, and here this is knowledge *tout court*, is given as the 'object' of a cognition which qualifies as an *intuition*. It is completely inaccurate to claim that Descartes confuses the psychological, *contingent* conditions under which topics in science or factors in scientific cognition are to be enumerated according to practical rules (since he admits that their order can be arbitrary), with the *epistemic* criteria whereby any given function of the mind can be certainly and self-evidently demarcated insofar as the function itself satisfies the condition of being the possible 'object' of an intuition.

The fifth remark of the first group specifies that there is one single power, purely and distinctly spiritual, which when conjoined with corporeally inspired images produces what an enumeration considers to be four *faculties*. But "according to its *different functions*, then, the same power is called either pure intellect or imagination or memory or sense perception." [ibid. I. 42] Granted the intellect's success in reaching the 'object' of cognition when this content is an abstract simple (or unreal entity), such as a logical axiom, or where the content is the psychical state of the subject, given in a certain and self-evidential awareness, what of the material simples, i.e. the constituents of physical things? When the cognitive power is conjoined with sensory perceptions of a physical thing, "the idea of that thing must be formed as distinctly as possible in the imagination. In order to do this properly, the thing itself which

¹⁰ A compatible account of the first five remarks is offered by John Yolton. *Perceptual Acquaintance from Descartes to Reid*. Blackwells, 1984. pp. 19-22.

this idea is to represent should be displayed to the external senses." [ibid. I. 43] This crucial passage in the transitional paragraph between the five remarks about the knowing subject and the eight theorems about the object of knowledge cannot be over-emphasized. It marks the point of departure from a proto-phenomenological account of Cartesian intuition in the *Rules* and Husserl's primitive, irreducible notion of intuition in the *Logical Investigations*.

In summary, Descartes' early notion of intuition as an operation of the understanding has the following essential characteristics:

- (i) it is certain, i.e. does not admit even minimal doubt;
- (ii) it is self-evident, i.e. presents itself as absolute or self-founding;
- (iii) it is instantaneous, i.e. given in one temporal 'moment'.¹¹

In terms of the intuitive content, possible 'objects' of intuition are:

- (iv) abstract simples, i.e. mathematical or logical truths;
- (v) material simples, e.g. a colour, a shape, a sound, etc.; and relations which hold between material simples;
- (vi) material composites, each of whose constituent simples and their complete inter-relations have been adequately intuited;
- (vii) one's own mental states, and this includes propositional attitudes about instances of (iv) - (vi), i.e. "that p is the case".

Though Descartes would not have had to contend with any reluctance on the part of his critics regarding his use of the term *intuitus*, though its range may have been open to dispute, such was not to be the fate of Husserl's use of the German equivalent, *Anschauung*. This term was first introduced into German philosophical discourse in the 18th century for the purpose of rendering the Latin term *intuitus* and its cognates and was systematically employed by Kant in his major works. Husserl's use of this term, however, cannot be traced to late scholastic terminology, any more than can the term 'intentionality'¹²;

¹¹ Instantaneous: "grasp each truth by means of a single and distinct act". Rule IX. CSM I. 33; "the whole proposition must be understood all at once, and not bit by bit." Rule XI, *ibid.* I. 37.

¹² Christian Knudsen. "Intentions and Impositions" in, *Cambridge History of Later Mediaeval Philosophy*. Ed. by N. Kretzmann et al. Cambridge, 1982. pp. 479-95.

its distinctively modern usage has its origin no earlier than the 17th century -- and that means Descartes and John Locke.¹³ Jaako Hintikka summarizes his own research into this etymology and its relevance for understanding Husserl's writings:

Husserl makes heavy use of a term whose primary function is to call attention to what is immediately given to us in experience. This term is intuition (*anschauung*). Unfortunately it is one of the least clearly understood terms in philosophical language. Its semantical history makes it particularly prone to misunderstandings.... It is thus a serious mistake to attribute to Husserl a view of intuition as a separate source of truth or certainty. Intuition is not a separate epistemological consultant, it is a generic term for whatever any privileged consultant tells me. An expression like "immediate intuitive truth" is for Husserl a pleonasm.¹⁴

As we have pointed out above, it is quite plausible to interpret what Descartes has to say about intuition in the *Rules* as pertaining to a *faculty* model of the mind, and hence to construe intuition as "a separate source of truth". However, as with a number of other central Cartesian terms, e.g. substance, idea, science, etc., this one also is ambiguous. The fifth remark of the first group in Rule XII clearly indicates another reading of intuition as a discernible *function* of a unitary cognitive power, in virtue of which specific features of its act-character and its ideative content can be delimited. One can arguably criticize Descartes for not highlighting this ambiguity, either here or later in the *Meditations*, but one should not fault him when the reader fails to discern the ambiguity and subsumes all statements about intuition under a faculty model.

One of Husserl's earliest critics, Moritz Schlick, accused Husserl of something similar to a facultative interpretation of intuition, of espousing an epistemological theory which relied on a mysterious and privileged mental insight. Schlick claimed that such a private insight was only available to those who had already acquiesced to the cogency of the phenomenological project. Husserl's *Ideas*, "asserts the existence of a peculiar intuition, that is *not a real psychological act*, and that if someone fails to find *such an experience which does not fall within the domain of psychology*, this indicates that he has

¹³ Louis Loeb admirably documents the congruence of meaning for 'intuition' in Descartes and Locke. *From Descartes to Hume*. Cornell Univ. Press, 1981. pp. 37-43.

¹⁴ Hintikka, in Smith & Smith. *op. cit.* pp. 86-7.

not understood the doctrine, that he has not yet penetrated to the correct attitude of experience and thought, for this requires 'peculiar, strenuous studies'."

This passage from Schlick's *General Theory of Knowledge*¹⁵ is quoted by Husserl himself in the Foreword to Volume Two, Part Two, of the 1920 edition of the *Logical Investigations* and though the attack is directed towards *Ideas: First Book* (1913), it is equally culpable as a misconstrual of Husserl's term in the 1900 work. If this was one of the first such remarks castigating Husserl for his resort to an almost hermetic doctrine of privileged access via intuition and the reduction, it was not to be the last, for such disparagement of the foundations of his transcendental idealism persists today. Husserl's response to this charge was particularly acerbic and reminds one of Descartes' barely controlled vexation in the face of Bourdin's Seventh Objections. "The total impossibility that I should have been able to utter *so insane an assertion* as that attributed to me by Schlick... and the falsity of the rest of his exposition of the meaning of phenomenology, must be plain to anyone familiar with *this meaning*." [LI. 663; emphasis added] Though this counter-objection to Schlick's cursory dismissal and Hintikka's defence of the cogency of Husserl's usage are strictly relevant to the later Husserl's mature reworking of fundamental phenomenological concepts such as intuition, in this specific instance, eidetic intuition or seeing of essences is only an enriched and more complex version of the same basic notion in the 1900 work.

Intuition is such a primitive term in Husserl's early work that it never receives an unequivocal definition in the manner in which so many other terms are carefully circumscribed. It is possible, however, to tease out a definition which will provide signposts for delimiting both characteristics of its cognitive operation and those things which are open to intuition. Clues to such indicative features are scattered throughout the six investigations, most of which employ an equally primitive term,

¹⁵ This passage was deleted from the Second Edition of Schlick's work, but not due to Husserl's "very sharp comments": "Husserl accused me of having read his book too hastily, but in the very same sentence misquoted my own. Further he complained that I had falsely assumed that 'ideation' was not intended as a real mental act. This was a misunderstanding.... The clearing up of this leaves untouched the arguments against phenomenology set forth in the text." Schlick. *op. cit.* p. 139, note 37.

'presentation'¹⁶. Chapter Six of the Fifth Investigation synthesizes thirteen (!) ambiguities in regard to this term¹⁷ of which one is directly counterposed with intuition.

To mere thinking 'presentation' is opposed; plainly this means the intuition which gives fulfilment, and adequate fulfilment, to the mere meaning intention....What we intuit stands before our eyes in perception or imagination just as we intended it in our thought. To present something to oneself means therefore to achieve a corresponding intuition of what one merely thought of or what one meant but only at best very inadequately intuited. [LI. 653]

This should strike a chord with the reader about Descartes' remark to the effect that all conscious activity is thinking, but only some thoughts are ideas. [CSM II. 113] For Husserl, if some thing is presented to the mind, than that thing is open to further qualification as the possible 'object' of an intuition. What could count as a possible 'object' of an intuitive presentation? In regard to external things, Husserl says that this occurs in perception, imagination and representation, i.e. memory or picture-consciousness, but only insofar as the 'grasp' of understanding is coupled with an *interpretation*; and this latter means that the sense of the thing is given along with the thing itself. This is not to be confused with, though it is parallel on a lower cognitive level with, the *meaning* of a word or a sign -- of this relation, more later.

Nor is this *sense* to be extracted from corporeal *sensations*, since deprived of any meaning-giving character, all experiences are merely lived through. Unthinking sensations do not count as *signs* of the properties of an object and their combination does not count as a sign of the object itself; such would be the case for animal consciousness. It is not the case that the mind first *looks* at its sensations, *then* turns them into perceptual objects, *then* bases an interpretation on them; such sequential, layered discrimination only takes place in *reflection* on the process of understanding. In their original, naive givenness, sensations are "components of our presentative experience, *parts* of its descriptive content, but

¹⁶ 'Presentation' is J. N. Findlay's translation for the German *Vorstellung*, otherwise often translated as 'idea'; other editors reserve this English term for *Gegenwartigung*, and 'presentification' for *Vorgegenwartigung*. See Bernet, Kern & Marbach's comments on this. BKM. *op. cit.* p. 144.

¹⁷ "Not to say that Husserl's sensitivity and skill in making linguistic distinctions are not among the most extraordinary on record. The *Untersuchungen* abound with examples. The chapter on the thirteen (!) uses of *Vorstellung* (idea) is as richly satisfying as a Bach concerto." Gustav Bergmann. "The Ontology of E. Husserl", in *Logic and Reality*. Univ. Wisconsin Press, 1964. p. 219.

are not at all its objects.... Sense-contents provide, as it were, the analogical building-stuff for the content of the object presented by their means." [LI. 309-10] Although Husserl's formal ontological framework of parts and wholes is far more sophisticated than Descartes' simple and complex natures, this statement is roughly equivalent to Theorem D5 of Rule XII.

Phenomenological analysis reveals the ambiguity latent in empiricist discussions of the 'location' in subjective/objective terms of so-called secondary qualities. The same words (colour, shape, sound) whose central motif is sensation are applied to the apparent determinations of things, on one hand, and to the presentative aspects of our perceptions, on the other. But there is an a priori opposition between the two: "Sensations, *animated* by interpretations, present objective determinations in corresponding percepts of things, but they are not themselves these objective determinations.... The apparent objects of external intuition are *meant unities*, not ideas or complexes of ideas in the Lockean sense of these terms." [LI. 356]

Properties taken as attributive aspects of an object are clearly inseparable from their concrete basis in the object itself. Insofar as an object's properties are given as the contents of an intentional act, they cannot *exist* independently of the object to which they are attributed, but each such property qua content can be independently *meant*. The intention does not segregate essentially dependent parts into independent pieces, but rather refers to those moments *as meant elements* of the whole perceptual object. Thus, "not every meaning is an *intuitive beholding*, and not every intuition an adequate beholding of its object, *embracing* that object perfectly and exhaustively in itself." This is very similar to Descartes' remarks concerning the distinction between the intellect's grasp (*prendre*) and its comprehension (*comprendre*): that is, between an intuition of a simple nature conveyed in the *idea* of some thing, and intuitions of all the simples which completely comprise the truly assertible *ideata* which the singularly grasped idea could possibly pick out.

Such an enriching or enlarging of cognitive grasp into all-embracing comprehension is a direct function of the *fulfilment* of an intuitive presentation. In the First Investigation, Husserl signalled the "long, difficult analyses" which would be needed to clarify the relations between cognitive grasp of

meaning-intention (signitive) and the straight-forward presentation of an intentional content (intuitive). "The draft it [the former] makes on intuition is as-it-were cashed." [LI. 294] This *totalizing act*¹⁸ in which a fusion takes place between a meaning-intention and its intuitive 'substance' shows that the discrimination of essential dependent parts of such intentions is not exhausted by the moments 'act' and 'matter'; "The work of intuition... contributes to the intended act, when authentically fulfilled, a genuinely novel element, to which the name 'fullness' may be given". [LI. 722]

The intentional content of any psychical act directed towards an individual person, perhaps a loved one, can be given through various sensuous 'matters', some of which are only signitive. The word written on a card, the name spoken, the letters FB traced on a frosted window -- are not themselves intuitions of this woman, the way mediate *pictorial* intuitions are so presented, e.g. a photograph, a drawing, etc. Rather their significance (i.e. sense-endowed aspect) is fulfilled only if there is some possible intuition, sensuous or non-sensuous, to which all 'matters' univocally pertain, i.e. in *propria persona*, in her remembered face, her fantasized face.

Fullness is... a characteristic moment of presentations alongside of quality and matter, a positive constituent *only* in the case of intuitive presentations, a privation in the case of signitive.... The ideal of fullness would accordingly be reached in a presentation which would embrace its object, entire and whole, in its phenomenological content. [LI. 729]

Thus we learn that a presentation can have a sensuous 'matter' (as a *reell* part of its intentional content), given in perception without being an intuition, specifically when it is a presentation of a sign qua sign. Can a presentation not given in perception, where the object does not appear in *propria persona*, be accurately termed an intuition? Yes, insofar as it is given in imagination or recollection, though of course, such phenomenological consideration entails moving from the domain of 'outer' perception to 'inner' perception. "Inner intuition need not be actual internal perception or other internal

¹⁸ On the importance of the notion of 'totalizing act' with regard to intuition of sensible objects in Husserl's early work before 1900, see J. K. Cooper-Wiele. *The Totalizing Act*. Kluwer, 1989. pp. 74-86.

experience [*erfahrung*] e.g. recollection; its purposes are as well or even better served by any free fictions of inner imagination provided they have enough intuitive clarity". [LI. 607]

Lest one mistakenly construe such internal perception as *introspection* or as some sort of concomitant reflexive perception parasitic on the original perception, Husserl has already carefully disqualified these spurious notions from the authentic phenomenological notion. Every perception in the broadest sense can be characterized by the intention of grasping its 'object' as if it were present, as if it were given in *propria persona*. To this intention, outer perception corresponds with complete perfection and thus achieves *adequacy* if the object given in the percept is itself actually present. It should be clear and evident, asserts Husserl, that "adequate perception can only be 'inner' perception, that it can only be trained upon experiences simultaneously given and belonging to a single experience with itself. This holds, precisely stated, only for experiences in the *purely phenomenological sense*." [LI. 542-3]

Let us recapitulate a few steps in our untangling of the basic features of intuition before making a final assay at the meaning of straight-forward intuition, which will then put us in a position to make a coherent estimate of higher-order (categorical) intuition. Husserl has carefully delimited one ambiguity, amongst many others, in the sense of presentation from 'mere thought', i.e. empty intending, in the manner in which one can say, "You look, but you don't *see*." In the case of mere thought, innumerable objects may be present in your visual field, but none is intended, none can be intended as the such-and-such, until the advertence of attention. All phenomenological analyses presuppose that the 'object' as a real (*reell*) part of an intentional content stands out against a background of unattended to 'objects'. Descartes touches on this notion in his brief remarks about ideas which are confused and obscure before they are brought to clarity and distinctness through *intellective insight*. That certain empirical, contingent conditions are operant in attending to something is a matter of psychological verification, but the essential necessity pertaining to an epistemic requirement that some thing only stands out as the focus of attentive regard is a phenomenological desideratum. That is why phase (v) of Cartesian methodical doubt is *not* a psychological stipulation for the holding-in-place of previously secured intuitions. For Descartes, this is achieved by the "sharp edge of the mind" (*acies mentis*), "the pure mental gaze"; for Husserl, such

a gaze is directed specifically towards the 'object' adequately given in a presentative mode insofar as it is a real (*reell*) part of the intentional content.

An exact demarcation of what can function as the intuitive content (*Gehalt*) of a straight-forward intuition is stated in a passage in the Fifth Investigation and is a preliminary disclosure of what will later be developed into the phenomenological reduction:

Phenomenological intuition... fundamentally *excludes* all psychological apperception and real (*reale*) assertion of existence, all positings of psycho-physical nature with its actual things, bodies and persons.... This *exclusion* is achieved eo ipso, since the phenomenological inspection of essence, in its turning of immanent ideation upon our inner intuitions, only turns its ideating gaze on what is proper to the real (*reellen*) or intentional being of the experiences inspected. [LI. 607]

In summary, for Husserl's early notion, x is open to a possible intuition under these conditions:

- (i) it is adequately, and not emptily, intended;
- (ii) it is a real (*reell*) part of the intentional content;
- (iii) it is given in inner or outer 'perception', in a variety of cognitive modes insofar as each mode determines its own manner of givenness;
- (iv) it can function as the fulfilment of a meaning-intention which itself is not intuitive but signitive;
- (v) it is not representative of some originary presentation upon which such representative acts are founded;
- (vi) it can only be the 'object' of a founding not a founded act, except in the case where the founded acts occur as identities-in-manifold, i.e. categorial intuition of species.

All of the above target features, except (vi), can be characterized as sensuous perceptions which have a straight-forward (*schlichter*) intuitive basis; but Husserl also makes a case for a super-sensuous

perception which has a categorial intuitive basis. He first mentions this at the opening of the Second Investigation, though it is not until the Sixth that he brings reflective analyses to bear on this. In the earlier passage, he states that the cognitive act in which we mean (or intend) the individual is essentially different from the act in which we mean the species of which the individual is an instance. In either case, the same concrete thing makes its appearance, but in the former case the appearance provides the basis for an individual reference whereby we intend this one thing here (*todi ti*), this feature or this part of the thing. In the latter case, it provides the basis for a conception directed towards the species, where what is meant or intended is the ideative content, e.g. the colour red as such. [LI. 339-40]

In the Sixth Investigation, acts of categorial intuition are explicitly described as being necessarily founded upon lower-order acts and ultimately on acts of sensuous intuition. Descartes' reference to the signitive characteristics of that which is represented to the mind as "the outer garments of its inner parts", is echoed by Husserl's own sartorial metaphors: "the meaning which *clings to* the words fits itself into what it means, its thought intention finds in the latter its fulfilling intuition" [LI. 676]; "the expression seems to be *applied to* the thing and to *clothe* it like a garment." [ibid. 688] Lower-order acts of sensuous intuition of aspects of a single thing are synthesized as being of one and the same thing since they are fulfilment's of partial expectations given via the original intuitions. Thus we know, using Husserl's example, that the pattern in the carpet continues beyond what is given in the immediate visual field, and this is confirmed or disconfirmed by further intuitions.

To some sensuous intuitions, a signitive function may not be copresented, e.g. in seeing the marks of an alien script, though to be sure, a signification must necessarily be available *for someone*. Husserl makes the ingenious suggestion that some such cognition probably underscores the wordless process of scientific discovery: "we observe here how trains of thought sweep on to a large extent without bondage to appropriate words, set off by a flood of intuitive imagery or by their own associative interconnections." [ibid. 716] This is not far removed from Descartes' prescriptions regarding the enumeration of examples in mathematical research and their subsequent *run-through* in a continuous movement of thought which "sweeps" to its conclusion.

There are other syntheses of identification besides the grasp of the unity-in-manifold of various aspects of a single thing. Two further processes are discussed under the heading of supra-sensuous intuition, the first of which concerns the *logical categories* according to which identifiable semantic meanings which fulfil lower-order intuitions are inter-connected in a *propositional* format. Such inter-connections, for which logical terms such as being, unity, plurality, number, ground, etc. correspond, are not themselves the 'objects' of straight-forward intuition, but arise through reflection upon certain intuitive acts, and so fall within the sphere of inner sense or inner perception. [ibid. 782] Just as the sensible object stands to sensory perception, so the state-of-affairs stands to the "becoming aware" in which it is given and for which a proposition is its expression. But with respect to these founded acts, it is not in these acts as 'objects', but in the 'objects' of these acts, that we have the abstractive basis which enables us to realize the concepts for the logical categories.

This preliminary exposition of the intuitive basis for cognition of logical categories is essential for Husserl's postulation of the *categorial intuition* of species.¹⁹ A backward reference to previous analyses of acts of sensuous intuition directed towards a *single object* reminds us that even here there is a continuous synthesis of fulfilment through separable intuitions of aspects (pieces and moments) which are meant of one and the same object. But the unity of identification is not the same as the unity of an *act* of identification; in this case, an identification is performed, but no identity is meant. Only when we employ this perceptual series to found a new act, and when we articulate our percepts and relate their objects to each other, does the unity holding amongst these percepts provide a purchase for a *consciousness* of identity. Herein, the identity is made objective, the moments of coincidence serve as representative content for a new percept, founded upon these lower-order percepts. [ibid. 790-1] This new type of percept is categorial intuition and its unique representative content is the species meant via all particular instances.

¹⁹ On the difference between intuition of logical categories and intuition of essences, see E. Levinas. *The Theory of Intuition in Husserl's Phenomenology*. trans. by Andre Orianne. Northwestern Univ. Press, 1973. p. 80.

Whereas in the synthesis of aspects of a single thing, the separable intuitive acts are merely serried or iterated, in the higher-order categorial act, a *collection* of 'objects' is given as the representative content via categorial forms such as "and", "or", and "is". This content is unique but is not the result of an *abstraction* from all underlying, founded contents, though there is an abstraction (in the sense of exclusion) from the quality or act-feature, and the interpretative sense. In the signitive identification of the species-sense, the identity of the meant 'objects' is not *lived through*, but is merely *thought of*, that is, it is a concept. Whereas in the case of the intuited 'objects', the identity is indeed perceived or imagined and is only given in experience where adequation is complete. "The mental bond which establishes the synthesis, is therefore a bond of thought or meaning (*meinung*) and is as such more or less fulfilled." [ibid. 809] The categorial moment binds together what is *essential* to all of the underlying sensuous acts, and connects their intentional *materials*. The identity of the essence is not the immediate *form of unity* among the sensuous contents but is the *unity of consciousness* based upon repeated cognitions of the same 'object' -- there is thus a unitary conscious act, given in an intuition, of an essence as such.

Descartes' mature notion of intuition in the *Meditations* is termed clear and distinct seeing, or the clear and distinct perception of the understanding alone. He employs a number of interchangeable phrases for this, but for the sake of brevity and to avoid equivocation, let us refer to it henceforth as "intellective seeing". It is our contention that this mature, enriched notion of intuition is only possible after Descartes' philosophical researches have satisfied conditions, or overcome problems, which the *Rules* dual operations of the mind, intuition and deduction, are too impoverished to explain. There are (at least) four developments between *The World* (1633) and the *Meditations* (1641) which permit, if not impel, Descartes' elaboration of intellective seeing. 1) The construal of ideas as signs which signify a sensory percept caused by a physical object, in a manner similar to the way in which words signify their referents; 2) the complete rejection of an imagistic or pictorial model of ideas as mediate entities in favour of a direct realist account; 3) the method of systematic doubt in the First and Second Meditations permits the formulation of an entirely new theory of the internal relations amongst ideas; 4) clarity and

distinctness are defined as criteria of evidence for the assertion of propositions based on certain knowledge.

One of the less-remarked passages where he speaks of the relation between ideas and 'objects', and what it *means* for the mind to have an idea of an 'object', is on the first page of *The World*:

Now if words, which *signify* nothing except by human convention, suffice to make us think of things to which they bear no resemblance, then why could nature not also have established some *sign* which would make us have the sensation of light, even if the sign contained nothing in itself which is similar to this sensation?... It is our mind which *represents* to us the idea of light each time our eye is affected by the action which *signifies* it. [CSM I.81; emphasis added]

He returns to this dual parallel -- word is to sign as meaning is to signified, and idea is to sign as 'object' is to signified -- in the *Optics*, "We should recall that our mind can be stimulated by many things other than images; by signs and words, for example, which in no way resemble the things they signify." Even if one persists in the belief that objects causally transmit 'images' to the brain of the perceiver, this is still not sufficient to support the further claim that such images are *simulacra* (or actual likenesses) of the original. "In no case does an image have to *resemble* the object it represents in all respects, for otherwise there would be no distinction between the object and its image. It is enough that the image resembles its object in a few respects." [ibid. I. 165] The example which he uses to illustrate the phrase "in a few respects" is of an engraving with its recognisable arrangement of lines, shapes and proportions. These are all geometrical features of the perceived object, and recognisable as being *about* some thing because of the underlying, all-pervasive geometrical structure of nature itself.

It is important to stress here that ideas per se are not themselves signs of things, as though knowing were merely "reading off" sensations produced in the sensory organs. This would be to conflate a physiological description with an epistemological explanation, something Descartes is always careful to keep apart. Physical objects causally produce motions in the sense-organs, and hence the brain, which the mind then interprets. It does so by *representing* the idea of the object which the corporeal motions signify. "This is the point of the reverse-sign relation: ideas are not signs of things, they are the interpretations of physical motions (of things), the cognitive counterpart of things and their physical

features. Interpretation is not signification; it is representation."²⁰ Compare also Descartes' own remarks against Regius in *Comments on a Certain Broadsheet*: "Everything over and above these utterances and pictures [about God] which we think of as being signified by them is represented to us by means of ideas which come to us from no other source than our own faculty of thinking." [ibid I. 305]

In a recent historical survey,²¹ Martin Jay gives a well-balanced exposition of both the mechanistic-mathematical account of visual perception and the linguistic-signitive extrapolation of this to the realm of ideas. He points out that it is entirely plausible to argue that these passages in *The World* and the *Optics* are amongst the earliest instances of a large-scale shift away from a purely visual, imagistic model of human consciousness toward a sign-based model of what it means for a mind to be conscious of some thing. Here, as in other cases of interpretation of Cartesian texts, one is confronted with two unreconciled, though not incompatible, explanations for one and the same investigative topic. It is to Descartes' immense credit that he attempts an overthrow of virtually every main principle of neo-Aristotelian, scholastic theory of knowledge and assays this with an absolute minimum of technical vocabulary. It is no small wonder that, in part due to his texts' great brevity and denseness, contemporary and current scholars grumble at consequent ambiguities. But one should not *succumb* to these ambiguities, despite the temptations, and mistake them for equivocations or confused thinking.

Clarity and distinctness have served to *characterize* intuition as early as Rule III of the *Rules* [CSM I. 14] and are repeatedly cited as such in the *Discourse*, where these two terms first appear in his cardinal epistemic rule: "to include nothing more in my judgements than what presented itself to my mind so clearly and so distinctly that I had no occasion to doubt it." [ibid. I. 120; cf. I. 127, 130, 131] However, it is not until the *Meditations* that clarity and distinctness are explicated as *criteria* of the evidential givenness of ideas and the certainty of judgements based on them.²² The ground is prepared for such an explication as the result of the purging of false beliefs and prejudices through methodical doubt

²⁰ John Yolton *op. cit.* p. 26.

²¹ Martin Jay. *Downcast Eyes: The Denigration of Vision in 20th C. French Thought*. Univ. California Press, 1994. Pp. 69-82.

²² E. M. Curley points out that clarity and distinctness are not used in their technical sense until the piece of wax episode; see *Descartes Against the Skeptics*. Blackwells. 1978. p. 72, note.

in the First and Second Meditations. It is from the *reduced* standpoint achieved at the opening of the Third Meditation that a genuinely novel model of ideas emerges. More than this, the reduced world of the meditator leaves him with only his thoughts -- *cogito ergo cogitata*.

Not all thoughts are ideas, and not all ideas are clear and distinct. In a Letter to Gibieuf of 1642, Descartes states that "the soul is always thinking... that whatever constitutes the nature of a thing always belongs to it as long as it exists." [ibid. III. 203] Whether awake or asleep, there is always some mental activity, even though no trace remains in the memory. Insofar as any thought is occurrent, one cannot but be immediately aware of it. [ibid. II. 113, 171]; a thought is already given to the mind before the mind "turns towards it", i.e. fixes its attention thereon. No unattended to thought can be an idea, and he *sometimes* seems to indicate that bodily sensations, such as pain and hunger, also cannot properly be construed as ideas. Or at least, such sensations can never qualify as 'perceptions', the ideas of which are both clear *and* distinct, at best they would be clear, as he indicates at *Principles* I. 46. [ibid. I. 208]

In a passage in the Sixth Meditation, he observes that if the nerves in the foot are violently disturbed, the motion is communicated to the brain "and there gives the mind a sign [*ibi menti signum*] for having a certain sensation, namely the sensation of a pain as occurring in the foot". [ibid. II. 60] It might just as feasibly have been instituted that the mind was *aware of* the actual motion of the animal spirits in the brain. In a Letter to Arnauld of 1648 [ibid. III. 357], Descartes remarks that where infants are directly, though inattentively aware of bodily sensations, adults have the sensation and simultaneously perceive something else about it. They are also able to *reflect* on the sensation, but since these two thoughts occur together, they *appear* to be indistinguishable from each other. The implication here, of course, is that the sensation and its reflected ideation are actually distinguishable, though only through a process of abstraction.

With respect to the reverse-sign relation discussed above, such an occurrence as a bodily sensation would not qualify as an idea. It could not be said that the mind *represents* the idea of a painful sensation when the physical motions which signify it take place. Rather, the whole relation collapses: the

painful sensation *just is* that set of violent physical motions which triggers or occasions the sign that it's occurring now. In the *Passions of the Soul*, he carefully delimits bodily sensations, e.g. "hunger, thirst and other natural appetites", from sensory perceptions, on the one hand, and the emotions proper, e.g. "joy, anger and the like", on the other. [ibid. I. 337-8] Of this third class, he says that they alone are properly predicated of the soul itself.²³

In virtually all of the cases where Descartes discusses sensations he is referring to what is more commonly called the secondary qualities of an object: "light and colours, sounds, smells, tastes, heat and cold, and other tactile qualities." [ibid. II. 30] Cognitions of these sorts of things can indeed be characterized as ideas, though they contain "so little clarity and distinctness" that the objects to which they refer cannot be considered "real and positive". A. W. MacKenzie remarks that, "In the case of sensations themselves, it would be misleading to suggest that we mistake their objects, since they have no objects. The only mistake we may be inclined to make in the case of sensations is to take them as having objects - that is, as representing something."²⁴ Given Descartes' commitment to a mechanistic account of the physiology of perception based on a mathematical model of natural order, it would be more fitting to refer to so-called secondary qualities as *macro-features* of objects which do not represent anything outside the mind, and to so-called primary qualities as *micro-features* which do indeed represent things outside the mind. These fairly neutral terms, micro and macro, allow commentators such as MacKenzie, Peter Markie, and others to classify distinctive group attributes without relying on the historically later terms, primary and secondary. His definitive position on this distinction is carefully and concisely stated at *Principles* I. 71. [ibid. I. 219] As such our ideas of macro-features can never attain to complete clarity and distinctness, but are always to some degree confused and obscure.

²³ "Husserl generalizes the distinction defended by Stumpf between feelings such as localized pain, which require no cognitive basis, and emotions such as joy and regret, which do have such a cognitive underpinning, so that it applies to perception. Visual sensations -- of redness and of form -- and tactile sensations -- of roughness and smoothness -- differ from acts of seeing and touching in the same way in which a localized pain differs from regret. Perceptual sensations and localized pains are non-intentional. Seeing and regret are intentional." Kevin Mulligan. "Perception" in Smith & Smith. *op. cit.* p. 182.

²⁴ A. W. MacKenzie, in *Reason, Will and Sensation*. Ed. by John Cottingham. Oxford, 1994. p. 264.

Since he is determined not to accept any of the neo-Aristotelian framework in his account of human knowledge²⁵, e.g. form and matter, substance and accident, the four causes, etc., he is certainly not going to discriminate between mind-dependent and mind-independent properties of objects in terms of their *qualities*, nor of observable alterations in terms of *qualitative* changes in state. He is quite explicit in demarcating macro from micro phenomena in terms of a corporeal nature which is subtended by a mathematical model. In his reflections on his previous scrutiny of the piece of wax, he isolates those kinds of things which he had clearly and distinctly perceived: size, shape, position, motion, and then further, substance, duration and number; and those of which his ideas were confused and obscure: colours, sounds, smells, tastes and so forth. [ibid. II. 30] A more fundamental category of the former group is *continuous quantity*, whose variable extension can further be analyzed in terms of its parts, to which can be assigned various sizes, shapes, positions, local motions and durations. [ibid. II. 44] The meditator's own understanding (i.e. intellective insight) of what constitutes the basis for clear and distinct ideas of sensory perceptions is specified at the cusp of the Fifth and Sixth Meditation. It is possible to achieve certain knowledge of God himself, other purely intellectual natures, and the "whole of that corporeal nature which is the subject-matter of pure mathematics."

There has been a great deal of debate on whether Descartes held a "veil of ideas" theory of sensory perception and what class of ideas is pertinent to this intermediary status. M. D. Wilson argues against John Yolton's direct realist interpretation of the Cartesian account of sensory perception, though she admits that her original position has been mitigated by further considerations. Attributions of a "veil of ideas" theory rest on a few enigmatic passages in the *Meditations*, and the detailed analyses of the three grades of sensory experience in the Sixth Replies. [ibid. II. 294-6] At the end of the Second Meditation, he reflects on the process whereby he came to understand the true nature of the piece of wax: "when I distinguish the wax from its outward forms; *take the clothes off*, as it were, and consider it naked." [ibid. II. 22] In the Third Meditation, when speaking of the quantifiable micro-features of an

²⁵ Though Descartes is determined not to accept the tradition's framework, it is another issue whether he is successful in resisting its influence. See esp. John Cottingham, in Tom Sorrell. *The Rise of Modern Philosophy*. Oxford, 1993.

object, he says that they are "merely modes of a substance", but the French edition expands on this phrase: "and as it were, the *garments* under which corporeal substance appears to us." But if this may be regarded as a mere rhetorical flourish, perhaps interpolated by the French translator, there is a passage in the Sixth Meditation which seems to be both definitive and unequivocal. Regarding the macro-features of an object and the ideas of them which are presented in my thoughts, "although the ideas were, strictly speaking, *the only immediate objects* of my sensory awareness", there was no reason to think that bodies which caused these ideas were not distinct from the bodies themselves. [ibid. II. 52] In this context, the reader should remember the previous explication of the manner in which an 'object' can be said to be in the intellect -- the 'objective reality' of an idea.

M. D. Wilson comments on this pivotal statement:

Descartes may *not* be explicitly making the point... that we directly perceive ideas of sense, as opposed to physical things. Rather, he may just be isolating what is 'properly and immediately sensed', according to terminological assumptions which distinguish what is 'proper to sense' from perception involving active intellectual processes. This reading would help to leave open the question of whether or not *physical objects or bodies* actually are (immediately or directly) perceived, in circumstances that we would count as sense perception.²⁶

As well as a clear-headed summary of the various positions in this debate, positions adopted by *inter alia* F. Aliquie, G. Rodis-Lewis, E. Gilson and Brian O'Neil, John Yolton draws attention to a vital distinction which Descartes makes about an ambiguity in the term 'idea', something which we have repeatedly emphasized in this research. Only if one takes idea in a univocal sense and ignores the dichotomy between (what we have called) an act-idea, as a cognitive operation, and an idea-content, as the form in which an 'object' is present to the mind, is Descartes forced to choose between an indirect realist approach and a disguised version of a neo-scholastic imagistic account. In reply to Arnauld's objections about ideas of sensory qualities, Descartes responds [ibid. II. 163] that ideas can be construed

²⁶ M. D. Wilson, in *ibid.* p. 216.

as either: forms of a kind, not composed of any matter and as representative; or cognitive operations which have 'formal' as opposed to 'objective' being.

If the term 'ideas' in the passage from the Sixth Meditation is taken in the sense of mental operation or activity, this is no more controversial and no more in line with indirect realism, than to state that one's own mental states are immanent in consciousness.

If ideas are in fact activities, the temptation to take the content of these activities as an entity may fade. And if... the causation of the *esse obiectivum* is semantic [i.e. sign-based], this temptation may disappear entirely. The reality of the object in the idea is the *meaning*, the cognitive meaning, of the object.... There is a new doctrine: to be in the understanding for physical objects just is *to be understood*.²⁷

Although it is not feasible, nor strictly relevant, to sort out this complex issue, one or two comments are called for. According to the order of reasons, advocated by the meditator with respect to his own path towards certain knowledge, at various stages previous notions are called up for review in light of further links having been secured. So too in the case of this passage about the *alleged* immediate 'objects' of perception. It opens with a point of order: that he will review everything that he previously took to be perceived by the senses and his reasons for thinking this. Then he will set out any reasons for calling these beliefs into doubt and finally having adjudicated these reasons with more certain criteria established in the foregoing five Meditations, whether they should *still be believed*.

One of the things which he took to be true of sensory perceptions was that ideas were the immediate objects of awareness. One of the reasons for believing this is that having sensory ideas was involuntary, in virtue of which such ideas seemed more lively and vivid. Another reason was his holding the belief that nothing is in the intellect that was not first present in sensory experience -- and this he has already rejected! The passage closes with the remark that he had already made up his mind about "how

²⁷ John Yolton. *op. cit.* pp. 35, 37. This last formulation by Yolton of "a new doctrine" is supported by Descartes' observation at the very end of the Second Meditation, regarding the piece of wax, which explicitly equates bodies being perceived *by the intellect alone* with their being understood. [CSM II. 22]

things were", *before* working out any arguments to prove it. But *later on* many experiences undermined the faith, i.e. non-evidential belief, which he had in the senses: including the notion that ideas are object-like entities which mediate between the knower and the thing known. Thus the "veil of ideas" theory is one which he throws out in favour of a more sophisticated representative model.

As well as intellectual insight into the *nature* of a particular thing, e.g. a piece of wax, Descartes sometimes seems to be saying that one also has a clear and distinct insight of the essence, of which that thing is an instance. Although there is usually a ready and unexamined equivalence between the terms 'nature' and 'essence' of some thing, at least in the case of mind and body, one can discriminate a further application of what clear and distinct ideas extend to: that is, the essence of *kinds* or classes of things of which individual minds and bodies are exemplifications. This emerges most clearly in *Principles* I. 48: "two ultimate classes of things: first intellectual or thinking things, i.e. those which pertain to mind or thinking substance; and secondly, material things, i.e. those which pertain to extended substance or body." [ibid. I. 208] Where we might now think of these as *universals* (or universal concepts), his discussion of what he calls 'universals' at *Principles* I. 59 pertains to the nominal relations which instances of some thing have with respect to an essence. Hence cognition of them cannot be said to involve a clear and distinct idea, except perhaps in the manner in which one has certain knowledge of math-logical laws, i.e. insofar as they pertain to a priori relations which must obtain amongst the 'objects' of thought.

The five common universals: genus, species, differentia, property, accident... arise solely from the fact that we make use of one and the same *idea* for thinking of all individual items which resemble each other: we apply one and the same *term* to all the things which are represented by the idea in question, and this is the universal term. [ibid. I. 212]

In his discussion in the Introduction of *Ideas: First Book* of the eidetic sciences which phenomenology investigates, Husserl divides the domain of material essences, or essences per se, from the *formal region* which is not co-ordinate with these essences, but is the empty form of any region whatever. As such, the latter prescribes for material ontologies a formal *structure* common to them all --

this formal structure is articulated in terms of *logical categories*. "Concepts such as property, relative determination, predicatively formed affair-complex, relationship, identity, equality, aggregate (collection), cardinal number, whole and part, genus and species, and the like, are examples of logical categories." [Ideas I. 21-2] One is reluctant to impute to Descartes a conflation of cognition via categorial relations with cognition of what is related via those (purely formal) categories. Nevertheless, it is an impartial assessment that the Cartesian notion of universal remains unexplored, aside from a few brief open-ended remarks.

In addition, this debate on whether Descartes held a "veil of ideas" position on the proper 'objects' of knowledge points to further large scale issues. To the extent that one agrees or disagrees that Descartes holds such a position and the reasons one advances in support of this, to the same extent and roughly for the same reasons, one would hold that Husserl does or does not endorse an exclusively 'object' oriented explanation of the phenomenological genesis of *meaning*. And this endorsement applies to both the notion of the signitive apprehension of a sign and the notion of the perceptual presentation of an 'object' qua intentional content. If there is a fairly consensual agreement on the interpretation of intentional content in the early Husserl, there is profound dissension on the status of his later reworking of this under the designation *noema*.²⁸

For the mature Descartes of the *Meditations*, what is it that one can have a clear and distinct idea of? In other words, towards what is an intellectual insight properly directed?

- (i) simple micro-structural properties of composite physical objects; one can only *seem* to have clear and distinct ideas of macro-structural properties;
- (ii) primitive notions, i.e. first principles which are innate [cf. CSM III. 218];
- (iii) math-logical truths which are derivable from primary notions [ibid. II. 45];

²⁸ On the noema and its relation to this earlier notion of intentional content, see Barry Smith. in Smith and Smith. *op. cit.* pp. 22-7; John Drummond. *Husserlian Intentionality and Non-Foundational Realism*. Kluwer, 1990. Chapter I.

- (iv) one's own mental states, i.e. cognitive operations;
- (v) essences of kinds or classes of things, e.g. minds and bodies;
- (vi) propositions (judgements) about states of affairs, with respect to (i) - (v).

Cartesian meditation is a method of discovery.... The cognitive exercises of the *Meditations* are engineered to suspend prejudice through skeptical doubt, to exercise one's intuition through the illumination of the cogito and the proofs of God's existence, and to prepare one for the intuitive apprehension of mind and body as having distinct essences through the exercises of the Second Meditation, which are consolidated in the arguments of the Sixth Meditation. The *Meditations* is successful when it can be laid aside in favour of direct apprehension of the clear but remote principles of First Philosophy.²⁹

In terms of the model of a mathematized natural order which permits a real distinction between micro- and macro-features of physical objects, the mathematical expression of the inherent structural relations amongst macro-features (natural laws), and judgements formed on the basis of the same criteria which impart evidential certainty to these laws, Descartes can stipulate his most general epistemic rule: That whatever is clearly and distinctly perceived is true, i.e. every clear and distinct perception is undoubtedly something real and positive. [CSM II. 43] That it is *real* pertains to the 'objective' reality of an idea; that it is *positive* pertains to the 'fact' that such an idea cannot signify nothing, but must signify some x whose representation it is. The most succinct terminological expansion of the two key terms, 'clear' and 'distinct', occurs at *Principles* I. 45.

I call a perception 'clear' when it is *present* and accessible to the attentive mind -- just as we say that we *see* something clearly when it is present to the eye's gaze.... I call a perception 'distinct' if, as well as being clear, it is so *sharply separated* from all other perceptions that it contains within itself only what is clear. [CSM I. 207-8]

²⁹ Gary Hatfield. "The Senses and the Fleshless Eye", in *Essays on Descartes' Meditations*. Ed. by A. O. Rorty. Univ. California Press, 1986. p. 71. Gueroult argues against any interpretation of Descartes' knowledge of self as based on introspection, since this would lead to a psychologistic fallacy, Gueroult. *op. cit.* vol. I, pp. 46-7.

Husserl introduces his "principle of all principles" in *Ideas: First Book* in terms of what characterizes the legitimacy of an idea (or presentation) in a formula which nearly approximates Descartes' main epistemic rule, once the above definitions are built in.

That every originary presentive intuition is a legitimizing source of cognition, that everything originarily (in its 'personal' actuality) offered to us in intuition is to be accepted simply as what it is *presented as being*, but also only *within the limits* in which it is presented there. [*Ideas* I. 44]

The phrase "in its personal actuality" refers to just that immediate aspect in which some 'object' appears in propria persona; that such an originary givenness of the 'object' means that it is indeed a real (*reell*) part of the intentional content, and that nothing else not thus given shall be considered as pertinent to the cognition of its 'object' being taken as evidentially certain. In other words, the object of an intuition is clear only insofar as it is taken just as it presents itself, and distinct only insofar as its being clearly given is limited by the conditions under which only clearly given things can appear.

Where Husserl in the *Logical Investigations* spoke of straight-forward (*schlichter*) and categorial intuition, the later Husserl speaks of seeing (*einsehen*) or insight (*Einsicht*), on the one hand, and seeing of essences (*Wesensschauung*) or eidetic intuition, on the other. 'Seeing' becomes a *term of art* in the 1905-06 lectures and denominates the most primitive cognitive grasp with which consciousness is appraised.³⁰ 'Seeing' (*schauen, schauende*) and its cognates comprise the dominant motif of these lectures in much the same way as *video* and its cognates do in the *Meditations*³¹; and this for reasons which Husserl expresses in his turn towards Cartesian doubt. At the first level of the phenomenological orientation, the thesis of the natural attitude is brought to the surface for reflection on the status of scientific theories about the world. Under this theoretical aegis, it is uncertain, or at least unclear, how it is possible for cognition to reach its object -- the doubts unleashed by the skeptical assault have not yet

³⁰ Recent publication of Brentano's lectures on *Descriptive Psychology* from the 1890s reveal that Husserl's former teacher relied heavily on a primitive notion of intuition; Husserl may well have attended these lectures, although he had secured his own post.

³¹ On the dominance of 'seeing' and visual terminology in the *Meditations*, see (sic), Michel Henry. "Videre Videor", in *Genealogy of Psychoanalysis*. trans. by Douglas Brick. Stanford Univ. Press, 1992.

been overcome. This can only be accomplished through the phenomenological reduction which excludes all that is posited as transcendental, all that is allegedly beyond human knowledge's achievement.

If I am in the dark as to how cognition can reach that which is transcendent, not given in itself but 'intended as being outside', no cognition or science of the transcendent can help to dispel the darkness. What I want is clarity. I want to understand the possibility of that reaching.... I want to come face to face with the essence of the possibility of that reaching. I want to make it given to me in an act of 'seeing', [but] a 'seeing' cannot be demonstrated. [IP. 5]

At the second level, after the inception of radical doubt, a whole new domain of 'objects' of investigation is opened up. The essence of the sort of thinking which makes this available is the result of paying explicit attention to just that manner in which, irrespective of whether the 'object' of thought points to an actually existent object, 'objects' are given to consciousness as in some cases pointing beyond themselves. The givenness of the cogitata is self-evidential according to the criteria of clarity and distinctness established as pre-eminent in the case of the indubitable truth of the cogito. But the apodicticity with which the cogito is given is unique, it surpasses the condition "as long as one is thinking" of some thing. One cannot proceed further in a search for the evidence with which phenomena are presented by attending to this paragon content. One must investigate the manner in which it is possible for *anything else* to be given as a self-evident 'object' of cognition. This specific manner is denominated *seeing*, the direct and immediate apprehension of that which is given purely in its self-givenness.

At the third level, the question arises; "How far does self-givenness reach? We are once again led somewhat deeper, and in depths lie the obscurities, and in obscurities lie the problems". [IP. 8] At least part of the obscurity rests in an equivocation in the meaning of transcendence and immanence, an ambiguity which unthinkingly can have been transposed from its significance at the naive level of experience into this reduced or 'bracketed' level. To continue to think of transcendence as pertaining to whatever it is that the appearance points to beyond itself is to surreptitiously re-introduce the thesis of the actual being of the world. Rather, transcendence and immanence must be reconceptualized in terms of the

now obvious elision in the meaning of 'appearance' (phenomena): between appearance *eo ipso* and that which appears *in the appearance*. There are now two absolute data under phenomenological scrutiny -- the givenness of the appearing and the givenness of the 'object' in the appearing.

At the first, naive level, seeing seemed such a simple operation: "The seeing just sees the things (*Sache*), the things are simply there and in the truly evident seeing, they are there in consciousness." But this being 'simply there' obscures the depths which radical skepticism has disclosed, and being in consciousness seems to be a matter of *containment*, e.g. "in a hull or a vessel." Here, of course, Husserl has parted from the Cartesian path, since for Descartes, though the mind is not in the body the way a pilot is in a vessel, ideas are 'modes' of cognition which *contain* formal and objective reality. For Husserl, in contrast, ideas are *constituted* in consciousness and it is the laborious and complex task of phenomenology to trace the stepwise aetiology of the constitution of 'objects' of all sorts within cognitive processes. Every such process, while being enacted, can be made the 'object' of a pure seeing, and is something absolutely given in this seeing, whose being cannot be doubted. [IP. 24] Husserl concludes the fourth lecture with this synoptic simile (though the reader may wince at the mention of a "mystical intuition"):

Thus as little interpretation as possible, but as pure an intuition as possible (*intuitio sine comprehensione*). In fact, we will hark back to the speech of the mystics when they describe the intellectual seeing which is supposed not to be a discursive knowledge. And the whole trick consists in this -- to give free rein to the seeing eye and to bracket the references which go beyond the "seeing" and are entangled with the seeing, along with the entities which are supposedly given and thought along with the "seeing", and finally to bracket what is read into them through the accompanying reflections. The crucial question is: Is the supposed object given in the proper sense? Is it, in the strictest sense, "seen" and grasped, or does the intention go beyond that? [IP. 50-1]

Both Descartes and Husserl disparage introspection as a valid form of intuition into one's own mental states or into the nature of the subject whose states they are.³² Whatever emphasis they place on sensuous perception as an exemplary form of cognition, one cannot be said to inwardly perceive the percipient mind. (Thus Descartes' rejoinder to Gassendi's remark that one can use the eye to see the eye in a mirror.) However, they both place a high premium on 'seeing' as a figurative term to designate clear and distinct apprehension of the 'object' of knowledge. Recent scholarship has pointed out the predominance of visual metaphors in the language with which philosophers, at least until the 20th century, talk about the most immediate and direct cognitive 'grasp'. The designation of certain knowing as a kind of 'seeing' is still readily apparent in many modern European languages. To the question whether or not you understand my meaning, you might respond that you 'see' or 'don't see'. This construction is paralleled in German: *sehen* is 'to see', *verstehen* is 'to understand', *nachsehen* is 'to check out or confirm', and so forth. Descartes relies heavily on visual terms, especially in the *Meditations*, to convey the notion of clear and distinct understanding. This usage crystallizes in one of his most far-reaching phrases, *videre videor*, "it seems that I see". Why then the derogation of *introspection*, 'looking within', for the truth of consciousness or the nature of the self? Because of the profound difference between the notions of *looking* and *seeing*; and for Husserl, seeing just is *understanding* an 'object' as it is directly given in experience, and not via some privileged access.³³

At one time or another, we have all had the experience of walking in the woods, a natural habitat removed from our usual environs. Perhaps you are with a friend who, at some point in your walk, halts abruptly and says, "Look over there! Do you see that red squirrel?" You follow his pointing finger

³² "Pure phenomenology as science... can only be essence investigation, and not at all an investigation of being-there; all 'introspection' and every judgment based on such 'experience' falls outside its framework." *Philosophy as Rigorous Science*, in HSW. 183.

³³ See E. Stroker: Husserl's appeal to intuition, made so often just in his work of 1913, could easily give the impression that our understanding here no longer suffices. Thus one could get the impression that, under the label 'essential insight' (*Wesenschau*), which is talked about so much in the *Ideas*, Husserl propounded an intuitionism whose only source of legitimation seemed to be precisely the evidence, characterized as 'experience of truth', or even as its 'internalization', which could presumably be had only by those who are specially gifted, capable of the right insight." in "Husserl's Principle of Evidence". *Contemporary German Philosophy*. D. E. Christensen (Ed.) Penn State Press, 1982. p. 115.

and survey the nearest trees but you don't see a red squirrel. "But you're *looking* right at it", your friend might comment. You look again; suddenly a component of your perceptual field resolves itself into a red squirrel; what you had taken to be a chunk of bark is in fact a small, furry creature. You were *looking* at it, but you didn't *see* it. This usage is perfectly captured in the etymological meaning of *introspection*, *retrospection*, *spectator*, and so forth. *specto* is 'to look at', thus *introspection*, 'to look within', only orients the viewer in the right direction, a notion which Descartes endorses when he talks about attention or the attentive mind. But it is *video*, 'seeing', which allows (or elicits) the resolution, the bringing into fullness, of the knowing subject's self within intuitive clarity.³⁴ So, much later, when Hume looked within for the self and found naught, he was looking in the right place, he just shouldn't have been only *looking*.

Six years after these lectures, in the 1911 article *Philosophy as Rigorous Science*, Husserl withdraws his earlier comparison of pure intuition with the sort of intuition spoken of by mystics. If anything, he says here, mystification resides in the attempt to exploit phenomenological insights while remaining within the natural attitude. "*The spell of inborn naturalism* also consists in the fact that it makes it so difficult for all of us to see essences or ideas.... Intuiting essences conceals no more difficulties or 'mystical' secrets than does perception." [HSW. 181] He goes on to explicitly identify the proper domain of phenomenological investigations as those disclosed by intuitions of the essences of conscious states and processes: perception, imagination, recollection, judgement, emotion, the will. Here he rapidly summarizes some of the main points of the Second Investigation regarding the fulfilment of intentions in intuition, adequate judgements based on valid cognitions, and his criticisms of Locke and Hume's notions of ideas. He is at some pains to stress one of his central theoretical insights: that the physical and the psychical are not the only explanatory frameworks within which philosophy must work. Phenomenology is not concerned with matter-of-fact mental events as occurring in this human being, in

³⁴ "Although Descartes did enjoin one to turn inward and to discover the givens of one's own experience, his method cannot patly be described as introspective. For Descartes was not asking one simply to look within.... Rather, he was hoping to help the reader discover, through the process of meditation, a source of impersonal, objective judgments that lies hidden in the intellect". Gary Hatfield. *op. cit.* p. 69.

these particular circumstances, but with the a priori conditions and structural relations without which cognition could not take place.

However, Husserl's mature notion of intuition as seeing or insight into both particulars and essences is presented in a systematic format in the Introduction to *Ideas: First Book* (1913), where he begins by addressing an issue not included in the preceding article. Transcendental phenomenology is not a science of matters-of-fact, whether physical or psychical, but an eidetic science of phenomena which can be characterized as *irreal*. That these phenomena are irrealities can only be adequately understood after the bracketing of the being (reality) of the world and all its attendant psycho-physical corollaries by means of the reduction. To denominate this transcendently reduced sphere as irreal is thus to avoid the expected dichotomy of real and ideal, a contrast which in metaphysical position-taking fails to be exclusive. This early mention of a position which entails neither a realism nor an idealism points forward to the source of a heated debate (which cannot be entered here) on the unique status which phenomenology claims in being a transcendental *idealism*, but an idealism of an entirely unprecedented nature.³⁵

Section 1 of Chapter One begins with a programmatic statement regarding sciences of the natural attitude to which object-provinces correspond. To all of their correct statements, there also correspond as basic sources which validate their legitimacy, certain intuitions in which these 'objects' are themselves given as existing. The presentative intuition (*gebende Anschauung*) proper to this level is experience, and that which presents something originally is intuition:

To have something real given originally and 'attentively to perceive' and 'experience' it in an intuiting simpliciter are one and the same. We have originary experience of concrete physical things in 'external perception', but no longer in memory or in forward-regarding expectation;

³⁵ "The realism of the *L. U.* was only a stage in the elaboration of phenomenology, and that what is now called the idealism of the *Ideas* had to appear in order to give an ontological value to the data of intuition. The idealism of *Ideas* is an intentional idealism and consequently conceives in a new way the mode of existing and the structure of consciousness, as well as the phenomenal existence of things. This idealism seems to solve the 'enigma of intuition'." Levinas. *op. cit.* p. 91; on the current status of this heated debate, see Hermann Philipse. "Transcendental Idealism" in Smith & Smith. *op. cit.* pp. 239-54.

we have originary experience of ourselves and of our states of consciousness in so-called internal or self-perception; not, however, of others and of their mental processes in 'empathy'. As belonging to them, we 'view the mental processes of others' on the basis of the perception of their outward manifestation in the organism. This empathic viewing is, more particularly, an intuiting, a presentive act, although no longer an act that is presentive of something originary. The other and his psychical life are, to be sure, given in consciousness as 'themselves there' and in union with his organism; but they are not, like the latter, given as originary. [Ideas I. 6]

This passage has been quoted at some length because it succinctly enumerates all the principal constituent modes in which intuition can legitimately be spoken of, aside from eidetic intuition which brings them all thematically to the fore. This passage also includes reference to an important new mode of intuition, one which is emergent with respect to his earlier version, that of the *empathetic* intuition of others. Further analyses in the Introduction, taken up in detail in later sections, elucidate reworkings of the earlier notion of straight-forward intuition into non-originary and originary, the latter of which is roughly congruent with the sense of 'in propria persona'. It is worth noting that later revised copies of the printed text are marked by Husserl to indicate that he had changed his mind, or was at least in some doubt, that one does *not* have originary intuition of others. Some of the more convoluted arguments in the Fifth Lecture of the *Cartesian Meditations* seem to be dedicated to a position that, through the intersubjective reduction, one may indeed attain an originary presentation of the other himself.

Any individual thing, as the 'object' of sciences of matters-of-fact, has a contingent existence, insofar as with regard to its essence, it could be otherwise. Even though there are necessary relations (scientific laws) which obtain between things, the fact that (sic) such laws do indeed obtain could be read otherwise; though of course, such an alternate 'reading' would express a new set of necessary relations. But the phrase "with regard to its essence" means that it pertains to the sense of anything contingent that it *have an essence*, its own specific character and features which can be predicated of it. Everything belonging to the essence of an individual of some kind (e.g. a musical tone), another individual of the same kind can also have -- that each tone is a tone pertains to the essence tone as such. An intuition of

something individual can be transmuted into eidetic seeing (ideation) and the essence presented immediately to consciousness, though this may be adequate or inadequate to a greater or lesser degree.

At least in the case of physical objects given originally in perception, intuition of essences is limited by correlative considerations. That is, certain categories of essences can only be given one-sidedly in a momentary intuition, many-sidedly in a sequence of intuitions, but never all-sidedly. Seeing an essence, nevertheless, is indeed consciousness of something, an 'object' in the broad sense proper to formal logic, i.e. any 'object' which is the subject of possible true predications. As an essence itself given in an intuition it can be 'objectivated' in other intentional acts, that it can be thought of vaguely or distinctly, that it can be imagined or recollected, and still remain just this same essence. Seeing an essence, in the pregnant sense, is an originally presentive intuition, grasping the essence in its 'personal selfhood' (in propria persona). Husserl remarks here in a footnote that the earlier notion of ideation (categorical intuition) requires a 'freer concept' which encompasses every consciousness directed simply and immediately to an essence. [ibid. 10, note 14]

There is, however, an ineliminable difference between these two orders of intuition: that directed towards the factually existent and that directed towards an essence. If one seizes with essential insight upon the 'objects' which are thus differentiated then all the 'semi-mystical thoughts' attached to them will be removed. The pure essence (*eidos*) can be exemplified through experience, in the paradigmatic case of perception, but can also be exemplified through the 'objects' of mere phantasy. As such, an eidetic intuition can take its point of departure from that which is non-perceptual, that which is imagined *as if* it were an actual instance of the type. "Positing of, and to begin with, intuitive seizing upon essences implies not the slightest of any individual factual existence; pure eidetic truths contain not the slightest assertion about matters of fact." [ibid. 11] The methodological technique of "free variation in phantasy" is re-invoked in greater detail in Part III [ibid. 157-60; 260-8], *Experience and Judgement* [EJ. 352-60] and in *Phenomenological Psychology*. [PP. 54-65]

The method of variation is the necessary propaedeutic for the *eidetic reduction*, the version of the reduction which distinguishes eidetic intuition (or *Wesenschauung*) from the earlier categorial intuition and provides Husserl with the *point d'appui* for his founding of phenomenology as an eidetic science. Variation in phantasy, and hence seeing of essences, has occasionally been misunderstood³⁶: you select some item *x* in your perceptual environs, fix your attention on it, and then imagine (in the sense of invent) other sorts of *x*, 'seeing' whether or not each imagined *x* can be construed as a genuine instance of the sort at issue. This is to commit two basic errors: to operate from the natural standpoint in which one has tacitly accepted the actual being of the world; and to confuse contingent, psychological features of one's imaginings with the ideal possibilities of an a priori conformity to type. Husserl's mature vision of phenomenology as an eidetic science is connected very closely with his own distinctive concept of a pure, a priori cognition, and this concept descends ultimately from his understanding of mathematical intuition.³⁷

In his 1929 work, *Formal and Transcendental Logic*, he remarks that "the concept *eidos* is also given a maximally broad sense,... this sense defines the only concept belonging to the ambiguous expression *a priori* that I grant philosophical recognition to." [FTL. 248, note] The most basic feature of a priori thinking is that it accomplishes a *liberation from the facts*, the reconfiguring of the fact into an *arbitrary example*. Husserl appeals to the 'objects' of geometry as pure spatial figures: the essence of 'triangle' and its essential laws are not tied to imagined or concrete triangles, though the geometer may *start from* any arbitrarily given example in his considerations of triangular possibilities. One would never be able to assert as axiomatic that all the angles of any triangle always equal 180 degrees unless all the intuited instances conformed to an ideal type. The crux of eidetic intuition here consists in seeing the invariable amongst all the variations; that in the coincidence of intentional contents of innumerable instances, one (or more) things remain unchanged. "This universal essence is the *eidos*, the *idea* in the

³⁶ E. g. by David Bell. *Husserl*. Routledge, 1990. pp. 194-5: describes the process as "fatuous and utterly naive", and the theory "an unmitigated failure".

³⁷ Carl Posy argues that this Husserlian notion of intuition is entirely compatible with L. E. Brouwer's mathematical intuitionism; see his "Mathematics as a Transcendental Science", in *Phenomenology and the Formal Sciences*. Thomas Seebohm & others (Ed.) Kluwer Academic, 1991. pp. 107-31.

Platonic sense, but apprehended purely and free from all metaphysical interpretations, therefore, taken precisely as it becomes given to us in *immediate intuitiveness* in the seeing of ideas which arises in that way." [PP. 54]

At this stage, we are in a position to draw together several strands in Husserl's project: the basic sense of intuition, pure phenomenology as an eidetic science, seeing of essences, and the Cartesian notion of *mathesis universalis*. "The insight into the pure eidetic universality permits every imaginable particularization to be known in advance (a priori) as a particularization of its essence, that is, in the consciousness of mere exemplification (as a member of the range of singular, pure possibilities)."³⁸ It is to the 17th century scientific revolution which instaurated a mathematical model for natural laws, in the work of Galileo, Descartes and Newton, that Husserl gives the historical credit for initial insights into purely eidetic sciences.

Descartes' quest for an all-embracing universal science would necessarily require that it be stripped of all contingent, qualitative determinations, liberated from the facts, if it were to have a priori legitimacy in all the domains which fell under its discipline. For Husserl, there is one final theme to which eidetic intuition must be directed. "Immediate seeing, not merely sensuous, experiential seeing, but seeing in the universal sense as an originally presentive consciousness of any kind whatever, is the ultimate legitimizing source of all rational assertions." [Ideas I. 36] Phenomenology itself is the discipline of such rational assertions about the a priori nature of consciousness. Eidetic intuition must be brought to bear on the ramiform possibilities which phenomenological analyses have disclosed amongst an immense diversity of a priori structures of consciousness itself.

³⁸ Bernet, Kern & Marbach. *op. cit.* p. 79.

CHAPTER 8

CONCLUSION -- RADICAL CONVERSION

We have followed two paths from our initial points of departure: Descartes' overthrow of traditional metaphysics through methodical doubt and Husserl's reinstatement of this doubt in the genesis of phenomenology. These two paths have traced a zig-zag pattern across a variety of topics, sometimes converging, sometimes diverging. But both these trajectories are plotted against an otherwise deserted landscape -- it is no arbitrary rhetorical choice that both repeatedly describe their enterprise as the exploration of a new world. Even their divergences occur as the result of encountering similar salient features in the landscape, but to which they ascribe different interpretations.

In these closing stages we reconsider a speculation made at the beginning, but which we can only now hope will have been adequately demonstrated. Descartes' and Husserl's philosophical projects are parallel since they are reacting to similar background problems (primarily skepticism), since they abandon the vocabulary and method of their predecessors, adopt a novel formal ontology, and commit to a grounding of subjectivity in the physical world. Specific convergent configurations have been seen in discussions of the intentionality of consciousness, the distinction between ideative act and content, the union of mind and body as dependent parts of a whole person, universal doubt as a methodic expedient for disengagement, and intuition as direct cognitive grasp or immediate presentation.

One of the main reasons why their trajectories are structurally isomorphic and reveal so many convergences, is due to an overriding initial demand, made on the reader, to actively participate in the enterprise -- and this is a call for radical conversion. One might think that the relation between Descartes and Husserl is obvious and topic-specific, but it isn't -- it's subtle and pervasive. Does Husserl talk about radical conversion in the *Cartesian Meditations* because his subject is Descartes' notion of a turning-away which must begin at the foundations? Well, yes of course, this is patently the case. But since 1907 Husserl had already been talking of radical conversion in many other contexts. Descartes speaks of turning away from the old world and turning towards a new world for reasons which underpin his entire

project, and Husserl speaks of this turning-with *for the same reasons*, some of which he cites as his motive for taking Descartes as his point of departure.

Is "conversion" such an anomalous term in philosophical discourse that no other instances could be cited? Wouldn't every philosopher call for the reader to turn with him and see things in a new light? Of course, and such "seeing" is no more a special talent or super-added faculty than the achievement of seeing the difference between *de dicto* and *de re* necessity; once you have seen the difference you are able to make distinctions unavailable before. It is as though an ill-defined misty patch suddenly resolves into sharply outlined contours. Every philosopher wants to convince or persuade the reader on a specific point, but this is not a call for *conversion*, which means: to abandon all previous convictions and commit oneself entirely to a new path.

The most likely reaction when reading the word "conversion" is to think of it in a religious context, in terms of a turning of one's faith. In the Old Testament, the Hebrew word for this is most commonly expressed in the verbal form, literally "to turn in one's tracks", away from one ritual or sect and towards another ritual or sect. Of its explicitly religious connotations, "it has been described as a dramatic confrontation in which the Law and the Temple are essential elements. Israel repents its adulterous abandonment of its covenant with God, an infidelity that involves it in a tragic series of misfortunes of which the Exile is the worst. In sorrow it now turns heart-broken to Him and to the faithful practice of the Law."¹

This notion undergoes a considerable modification in New Testament use of the term *epistrepho* [verbal again, the noun *epistrophe* is unknown in NT], which means "turning towards" Christ as saviour and turning away from all things opposed to Christ and his teaching. "Conversion is now described as exclusively concerned with a change in man. God is no longer portrayed as turning to man... [for] the incarnation is in every respect the ultimate turning of God to man."² Lest it be unthinkingly assumed that conversion occurs only *between* religious faiths or between a non-religious and a religious viewpoint, it

¹ E. R. Callahan. "Conversion", in *New Catholic Encyclopedia*. McGraw-Hill, 1967. vol. IV, p. 286; and James Strachan. "Conversion", in James Hastings (ed.) *Encyclopedia of Religion and Ethics*. vol. IV.

² Callahan. *ibid.* cf. also, Rudolf Bultmann. *Theology of the New Testament*. SCM Press, 1952. vol. I. 67-73.

is also characterised as intrinsic to the progress of faith *within* the Christian Church itself, i.e. from one sect to another. Robin Lane Fox cites several famous examples of early Christians who *lapsed* from belief to non-belief and remarks: "We do not hear of anyone who left Christianity for simple paganism without any accompanying philosophy: perhaps this silence is significant and a lapse from Christianity did always lead to a favour for some systematic belief."³ However, religious conversion is but one manifestation of a more fundamental cognitive-affective reorientation of the whole self away from the old and toward the new.

The Latin (and hence Vulgate) *con-vertō* is a nearly exact translation of the Greek *epi-strophe*, a key term which Plato employs towards the end of the famous analogy of the cave. Here then is an explicit philosophical usage of the term which predates the NT and inaugurates a secular etymology with which Augustine, amongst others, would have been well aware of.

The true analogy for this indwelling power in the soul and the instrument whereby each of us apprehends is that of an eye that could not be converted to the light from the darkness except by turning the whole body. Even so this organ of knowledge must be turned around from the world of becoming together with the entire soul, like the scene-shifting periactus in the theatre, until the soul is able to endure the contemplation of essence and the brightest region of being.... There might be an art, an art of the speediest and most effective shifting or conversion of the soul, not an art of producing vision in it, but on the assumption that it possesses vision but does not rightly direct it and does not look where it should, an art of bringing this about.⁴

A. D. Nock cites this passage from the *Republic*, as well as Seneca's *Epistles* (108.17), Aristotle's *Protrepticus*, and Cicero's *De Natura Deorum* (I. 77) in his chapter on "Conversion to Philosophy"⁵ before the Christian era. It is worth noting that in all the cases Nock considers, the person in question reorients himself away from a non-philosophic position towards philosophy per se. Nock argues convincingly that before the 4th Century BC, even inter-religious conversion must be understood in a highly restricted sense. For the various Greek and Near Eastern cults and their gods, there was no organised, systematic doctrine towards which anyone could orient their entire self. It was more a matter

³ Robin Lane Fox. *Pagans and Christians*. Penguin, 1986. p. 271.

⁴ Plato. *Republic*. VII. 518c-d. trans. by Paul Shorey.

⁵ A. D. Nock. *Conversion*. Oxford, 1961. [1933] pp. 164-86.

of observing specific precepts and rituals, usually in a very narrowly defined time and place, i.e. festivals and precincts. Beyond the sacred precinct, an adherent of Zeus Sabazios or Phrygian Cybele (etc.) would not consider his world view to be informed by his allegiance, or structured according to his beliefs (with the possible exception of Mithraism). If anything, it is only with the arrival of Plato's Academy, Aristotle and the other competing Schools that one can genuinely speak of a transformative conversion.

The passage from Plato is highly significant in another respect, for it synthesizes a number of salient points already discussed in previous chapters and points directly towards their optimal outcome -- a call for radical conversion. The "indwelling power in the soul" is virtually identical with Descartes' formulation of the innate cognitive power (*Rules IV*) which, when combined with other cognitive operations, produces the four mental functions (or faculties). The "true analogy" for this is the eye which turns from darkness to light; for Descartes, vision is the exemplary mode of intuition which pierces through the darkness thrown up by skeptical doubt and turns to rely on the natural light of reason. It is necessary that this vision turn away from the "world of becoming", Descartes' injunction to withdraw from the world and detach from the senses, in order to endure "the contemplation of essence and the brightest region of being", a description which both Descartes and Husserl employ to characterise the proper field of philosophical enquiry. And finally, that such an intellectual vision does not have to be instilled, but only directed to look where it should -- a Cartesian and Husserlian invocation of *video* (seeing) instead of *specto* (looking). Husserl's remark to the effect that the "irreal" objectivity of math/logical entities, towards which categorial intuition is directed, may be construed as referring to a "Platonic realm of being" finds more than a chance touchstone here.

It seems to me that there are two principal dimensions with respect to which one can be converted: the philosophical, which is this-worldly; and the religious, which is other-worldly. It seems to be a highly strained sense of the term to say that one is converted, for example, to a genre of music, a football team, a style of clothing, or a political party.⁶ In all such cases, everything else is left intact, only one component of one's world view has been changed. It is not the case that the world view itself

⁶ As several colleagues have pointed out, it does seem to have made sense to speak of a conversion to *Marxism*, the one arguable exception, and this probably because it was embraced with an almost *religious* fervour, if not fanaticism.

has been transformed, as a result of which *all* the components undergo change. In every case of religious conversion which William James examined a century ago both the self and the world are completely transformed.⁷ It is very common for the convert to speak of confronting an entirely *new world*, an expression which, as we have seen, both Descartes and Husserl use to describe the domain disclosed by their investigations. Of course, it seems trite to remark that it is hard to conceive how the self could be entirely transformed without its world being also thus affected; on the other hand, it seems *strange* to imagine what it would be for one's world to be overturned while the self remains as it was.

The most common rhetorical trope used to typify this profound change in self and world is that of *lose and gain*, a trope found often in both philosophical and NT-religious conversion contexts. Perhaps the best known passage: "For those who want to save their life will lose it, and those who lose their life for my sake will save (or find) it. What does it profit them if they gain the whole world, but forfeit themselves?"⁸ St. Augustine's experience of conversion occurred during a profound philosophical crisis. While reading St. Paul's Epistles (*Romans 7* is the best known first-hand account of conversion), he received a summons: "In an instant... it was as though the light of confidence flooded into my heart and all the darkness of doubt was dispelled."⁹ It is Augustine whom Arnauld quotes to Descartes for a precursor to the *cogito ergo sum*, and it is with Augustine's words that "Truth dwells within" that Husserl closes his own meditations.

What would discriminate religious from philosophical conversion? In the former case, the experience of conversion is the realisation that the new world is god's creation and the self god's creature. That it is irrelevant *how* one came to be in a position to be converted, or how the conversion was effected. The most famous example of Christian conversion, St. Paul on the road to Damascus, is also a paradigm for the unpreparedness, even the unwillingness, of the soon to be converted. But in the latter case, for the philosopher, the new world is constructed from the singular, irreducible point of view of the meditator and if, as is the case with Descartes, it shows a necessary role for god's will, this is still but a part of the overall picture. As well, for this sort of conversion, it is absolutely essential that the

⁷ William James. *The Varieties of Religious Experience*. N.Y., 1902. pp. 189-258.

⁸ RSV. Luke 9: 24; cf. also Mat. 16: 25, Mark 8: 35.

⁹ Augustine. *Confessions*. VIII. xii. 29. cf. Peter Brown. *Augustine of Hippo*. Faber, 1990. pp. 101-14.

philosophising self is able to look backward (so to speak) and point to all the discursive stages which inescapably result in this reorientation. This is the point of presenting the *Meditations* according to the order of reasons which exhibit these discursive stages so that the reader can follow the explorer's trail, and not just survey an already corrected and revised map.

Descartes indicates his awareness of another dimension of conversion when he states that there are two possible authorities for the assurance that one has attained certain knowledge: the natural light (reason) and divine grace, which he says is better left to theologians. The young Descartes would certainly have been familiar with the force of authority in illumination by divine grace. His years at the Jesuit College of La Fleche would have exposed him to the *Ratio Studiorum* and to Ignatius Loyola's *Spiritual Exercises*. Here in Loyola is an historical precedent for radical conversion more recent and far more personal than Plato or Augustine. Loyola was canonised in 1611 and the young student, a few years later, would have been dramatically impressed by the attendant ceremonies. Loyola himself had undergone a profound conversion experience while at Manresa, near Barcelona, in 1522. During this time he abandoned his previous career as a proud and idealistic hidalgo, retreated to a cave for solitude, and mortified his flesh through fasting and penance. His *Spiritual Exercises* are not a record of his own transformation -- this was compiled by his faithful disciple de Camara -- nor are they in any way a guidebook by which one could be converted. However, they are the direct consequence of his conversion and are designed to be followed, under the direction of a confessor, by a retreatant who desires to gain a deeper knowledge of the foundations of his own faith.¹⁰

L. J. Beck quite rightly points to the "formal similarity" between this work and Descartes' *Meditations*: both are divided into daily meditations which enjoin solitude and contemplation, both are punctuated with moments for rest, and their persuasive effect is cumulative upon multiple readings. The principal value of his comparison between these two exemplary texts is to clarify their convergent rhetorical purposes, which place a heavy demand on the reader or student to carry out these exercises for himself.

¹⁰ W. W. Meissner. *The Psychology of a Saint: Ignatius of Loyola*. Yale Univ. Press, 1992. pp. 69-108.

At the back of Descartes' mind is the idea... that philosophy is not a class-room subject of instruction but a special kind of activity; and that accordingly nobody can really begin to understand it except by being induced to indulge in the actual exercise of it, by grappling with the problems under the guidance and help of a more experienced thinker, but nevertheless, in the last resort, thinking the problems out for himself.¹¹

Gary Hatfield's recent work admirably shows the close analogy between the *Meditations* as cognitive exercises and then-current spiritual exercises.¹² Loyola's treatise with its basis in an Aristotelian account of cognition, and the works of Eustace de St. Paul in the Augustinian tradition, were both familiar to Descartes. Each emphasised three faculties or powers of the mind (memory, intellect and will) and the three ways or stages through which the meditator progresses. The scheme of three powers (along with sense perception) had long been endorsed by Descartes, in the *Rules*, the *Discourse*, and of course, as the several "courts of appeal" by which to adjudicate certain knowledge in the *Meditations* itself. The religious sense of the three ways comprised: the purgative, in which the body is mortified and one turns away from the senses; the illuminative, in which one becomes aware of one's moral power through Christ's example; and the unitive, in which one seeks to join or merge one's will with the divine will.

Hatfield astutely points out that both the three powers and the three ways are paralleled in Cartesian cognitive exercises. In the First Meditation, methodical doubt purges the senses of illusions and the memory of delusions (prejudices); in the Second and Third, the meditator's disclosure of the cogito occurs within the illumination of the natural light; and in the Fourth, the meditator seeks to direct his will in accordance with what has been clearly and distinctly perceived, and this means in accord with god's will. Our analyses of the phases of methodical doubt in Chapter 5 showed just this sequential structure: first, abandon prejudices and withdraw from the senses; second, clear and distinct seeing via the natural light; third, an affirmation by an act of will regarding that which one knows to be certain. Another parallel is that the discursive force of spiritual or cognitive exercises relies on both argumentation and exemplification.¹³ The process of doubt is presented in an argumentative form but one

¹¹ L. J. Beck. *The Metaphysics of Descartes*. Oxford, 1965. p. 28-38, quote p. 30.

¹² Gary Hatfield. "The Senses and the Fleshless Eye", in *Essays on Descartes' Meditations*. A. O. Rorty (Ed.) Univ. California, 1986. pp. 48-55.

¹³ Dalia Judovitz underscores the discursive weight carried by both rhetoric and argument. *Subjectivity and Representation in Descartes*. Cambridge, 1988. pp. 137-57.

grasps the truth of the proposition "cogito ergo sum" through exemplary insight. The doctrine of ideas articulates the necessary features of 'formal' and 'objective' reality and the innate principles with which they are inter-connected, but one insightfully grasps the reality of god prior to the proof of his existence. Hatfield observes that "the *Meditations* are not so much a continuous argument as a set of instructions for uncovering the truths that lie immanent in the intellect."

Descartes could also be said to subscribe to the moral precepts which were intrinsic to an ascetic or contemplative approach, especially in a monastic context -- poverty, chastity and obedience. His provisional moral code in Part Three of the *Discourse* is clearly enunciated along these lines, though in a more secular setting. [CSM I. 122-4] The First maxim is to obey the laws and customs of his country, including the Catholic religion; the Second, regarding constancy, is to be firm and decisive in all his actions; the Third is to always try to master himself rather than fortune, to change his desires rather than the worldly order; and the Fourth is to devote his whole life to cultivating the faculty of reason.

This moral code may seem little more than the adoption of simple spiritual guidelines by a solitary thinker, but the analogy to ascetic precepts holds also with his explicitly philosophical purposes in the *Meditations*. The meditator endorses *poverty* in discarding all preconceptions and prejudices acquired through education and tradition; *chastity* in complete disengagement from the world of the senses; and *obedience* to the rational injunction to abstain from what is open to minimal doubt and to affirm only what has been seen with evident insight. Later, we will discover that Husserl also, in his overt likening of the phenomenological orientation to a religious conversion, also employs a rhetoric associated with ascesis.

Descartes' appeal to figures of speech and analogies with conversion experiences may not be purely literary, but may have autobiographical sources as well. His dream of November 1619 may be seen as an account of just such a personal transformation, and though *prima facie* this may seem a mere anecdotal curiosity, it is worth reconsidering in virtue of a similar *point d'appui* twenty years later in the *Meditations*.¹⁴ In a state of "great mental agitation", the young chevalier fell asleep and in his first dream

¹⁴ "There is more than a nominal connection between the *mauvais genie* who appears in the posthumous *Olympica* and the malign demon of the *Meditations*. Both appear in the context of dreams, both raise the problem of providence, both are counterposed to the 'spirit of truth' or to certainty, and in both cases the

was assailed by several "phantoms" who so terrified him that he had to change course (in the dream town). With "a great weakness" in his right side he had difficulty walking, when a violent wind sprang up which swept him round in a kind of whirlpool. He made a determined effort to reach a college chapel where he intended to pray. He then noticed someone whom he knew but the strong wind prevented him from making any forward progress. When he awoke, "he felt at once a sharp pain which made him fear that it was the doing of some evil demon [sic] who had wanted to deceive him."

After an interval of two hours, he fell asleep again and at once "another dream" came to him, in which he thought he heard a loud and violent noise like a thunderclap. This so frightened him that he woke up and saw many fiery sparks scattered through the room. His biographer Baillet adds that this (hypnagogic?) phenomenon had happened to him several times before and it was "not very unusual" for him to see these bright flashes in the middle of the night. This time he wanted to perform an experiment, so blinking his eyes, he observed "the quality of the forms which were represented to him". He fell asleep again and had his "third dream" which involved a strange figure in a library and the alternatives symbolised by two books, a dictionary and a poetry anthology, which we have previously interpreted as indicative of the order of essences and the order of reasons.

It should strike almost any modern reader as odd that the so-called "second dream" consists of nothing more than a loud noise and bright flashes, and that it was not uncommon for him to experience these *while awake*. There have been several, disparate attempts to interpret Descartes' dream¹⁵ but as Freud himself pointed out when queried about this, there is simply not enough associated psychic material to work with, and much of the third dream bears the marks of a highly stylised symbolic reworking. Why bother then to bring the dream into our discussion of radical conversion? Because whatever its latent idiosyncratic meaning, Descartes himself considered it to be an extremely important turning point and one which was intimately linked with the "wonderful discovery" he had just made.

apparitions seem to represent the religious alternative to philosophy." Hiram Caton. *The Origin of Subjectivity*. Yale Univ. Press, 1973. p. 123, note.

¹⁵ On his dream, see Richard Kennington. "Descartes' Olympica", *Social Research*. 28 (1961), pp. 171-204; Bernd Jager. "The Three Dreams of Descartes", *Review Existential Psychology & Psychiatry*. 8 (1968), pp. 195-213; William Shea. *The Magic of Numbers and Motion*. Science History Pub., 1991. pp. 115-20.

Perhaps the most cogent assessment of these events, leaving aside interminable analyses of symbolic content, is that offered by Steven Gaukroger.¹⁶ The loud noise and flashing lights perhaps indicate the onset of a severe migraine; in addition, it is quite possible that Descartes was suffering a nervous breakdown. Gaukroger quotes an early 17th C. medical account of melancholy whose reported symptoms bear a striking resemblance to Descartes' own remarks on his emotional and physical condition, as well as the dream contents. "I suggest that the events of the days surrounding 10 November probably constituted a mental collapse of some kind, and that the thoughts on method that Descartes had been pursuing at the time came to symbolise his recovery from this."

Gaukroger highlights an inconsistency between the *Olympica Ms.* and the passage in the *Discourse* which recounts these events seventeen years later. In the former, Baillet reports that Descartes, "in a state of *great mental agitation*, went to bed quite filled with *this mental excitement* and preoccupied with the thought that that very day he had discovered the foundations of a wonderful system of knowledge." The *Discourse* version of these events is decidedly different: "fortunately having *no cares or problems to trouble me*, I stayed all day shut up alone in a stove-heated room, where I was completely free to converse with myself about my own thoughts." [CSM I. 116] In the former account, his mental agitation and enthusiasm is inspired by the wonderful discovery which his dream then articulates or symbolises. In the much later, cool and detached revision it seems as though the dream inspires a thorough re-examination of his previous scientific researches which then results in the construction of a new method.

Baillet mentions two references to *mirabilis scientiae fundamenta* in the text of the original ms. which he faithfully transcribed [AT. X. 179], but which of the two stages came first – dream or discovery? Gaukroger's reading offers a plausible reconciliation of the two accounts: having suffered a complete mental collapse *and* made a marvellous discovery, Descartes later *rationalised* his recovery in terms of the discovery. However, it seems quite odd that in Gaukroger's careful paraphrase of the *Olympica Ms.*, he completely omits the dreamer's supposition that the first dream might be the work of an evil genie who wanted to deceive him, and that he then offered a prayer to god to preserve him from

¹⁶ Steven Gaukroger. *Descartes: An Intellectual Biography*. Oxford, 1995. pp. 110-2.

all the ills which might be hanging over him as punishment for his sins. These are quite overt images of a conversion experience with religious connotations which are much the same as those reported by Loyola, amongst others.

It is arguable then that Descartes had an intimate acquaintance with the sort of transformation under review here; certainly in November 1619 and probably again in late 1628, during the Chandoux affair, though this would have been more of an intellectual *volte face*. Our current discussion involves the primary claim that some sort of radical conversion is demanded of the reader of the *Meditations*. And "conversion" here means that the reader is asked to *turn with* the meditator; in so doing to *turn away* from the old world and *turn towards* the new one. For this turning to be "radical" means that it must be carried out at the *root*, at the very basis of any experience whatsoever. In turning away from all one's previous convictions, they must be completely uprooted. In the building metaphor, everything must be demolished, nothing must be reused, thus to start again from the ground. All one's philosophical baggage must be left behind before one is suitably prepared to embark on this journey. It is not a journey with a pre-planned destination, nor one with any recognisable landmarks. In turning towards the path which opens ahead, the stability with which one can eventually reconstruct the itinerary lies in having established at the outset a method of fixing points along the route with utter reliability. The method of universal doubt reveals, through the natural light, the "primary notions" without which one could not have got underway and leads inevitably to those principles of *prima philosophia* which are the roots of the tree of scientific knowledge. Methodical doubt "provides the means for freeing one's attention from sensory ideas in order to attend to an independent source of knowledge: the pure deliverances of the intellect."¹⁷

In the preceding summary of the Cartesian sense of radical conversion, we have effectively traced its aetiology backwards from its most mature avowal in the *Meditations* to the cryptic dream imagery in the Olympica Ms. Running through these textual variations is the persistent theme of an intellectual or cognitive transformation.

¹⁷ Gary Hatfield. *op. cit.* p. 47.

In the fully explicit philosophical sense, cognitive conversion is 'the radical clarification and consequently the elimination of an exceedingly stubborn and misleading myth', by which a person spontaneously assumes that 'knowing is like looking, that objectivity is seeing what there is to be seen and not seeing what is not there, and that the real is what is out there now to be looked at.' But if cognitive conversion eliminates this *myth of naive realism*, it does so because it consists essentially in what Lonergan calls the 'discovery of the self-transcendence proper to the human process of coming to know', the recognition and appropriation, in other words, of the radical dynamism and structure of one's own cognitive capacities and operations.¹⁸

Walter Conn's sophisticated multi-disciplinary analysis of the cognitive dimension of conversion experience succinctly captures several central tenets of our argument. That this transformation involves the elimination of an epistemic myth whose explication reads very much like the sort of Aristotelian picture of knowledge attainment which Descartes so vigorously attacks. Knowing is *not* like looking, but rather like *seeing* in a certain way; that objectivity is an achievement of knowledge construction, not something already inertly constituted before one's knowing regard turns towards it. That what is real is as much a characteristic of the psychical as the physical and is not simply 'out there' in contraposition to an unreal inner domain. All of this Husserl would also wish to reject and transform, repeatedly denominating it 'naive realism', whose overturning is fulfilled in a 'self-transcendence proper to the human process of coming to know' -- an accurate depiction of the subject domain of the transcendental reduction.

It is only after Husserl's skeptical crisis in 1905/06 that one can legitimately speak of him calling for radical conversion on the part of the beginning philosopher. The notion itself, and the rhetorical tropes attached to it, do not appear in the *Logical Investigations*. The *Prolegomena*, however, does achieve the aim of demolishing the shaky edifice of empirical psychology in its derivation of logical truths, flawed at the very ground by its inability to discriminate the psychical act of logical judging from the 'content' of the logical judgement itself. The six investigations elaborate novel conceptual apparatus which are 'navigation equipment' necessary for the journey ahead. The announcement of this journey does not take place until shortly before the transcendental turn in the *Ideas*. It is thus not possible to *turn*

¹⁸ Walter Conn. *Christian Conversion*. N.Y.: Paulist Press, 1986. pp. 116-7; citing Bernard Lonergan. *Method in Theology*. 1972. pp. 238-40.

towards the new field of transcendental experience disclosed by the phenomenological reduction until the way forward is seen to be possible. Having razed psychologism on the island of skepticism and relativism, the mists which hang over the environing waters disperse, and a passage opens to a new world.

In the lectures for those years, he compares the current situation in philosophy with that of the 17th C. in which it was assumed that there could be only one method for achieving certain knowledge in philosophical enquiries, the same method as that of the natural sciences. But all natural sciences, precisely because they are 'natural', take for granted the general thesis of the world's being which they find lying-over-against their questioning. None of their questions penetrate beyond the naive acceptance of the worldly character of all worldly realities. But what does it mean for something to be 'worldly', to be a possible 'object' of cognition? This is the task of a genuine philosophy, one which eschews the naiveté which is 'natural', i.e. perfectly consonant with scientific cognition. "Philosophy lies in a wholly new dimension. It needs an entirely new point of departure and an entirely [or radically] new method distinguishing it in principle from any 'natural' science." [IP. 19]

Husserl describes this new point of departure in the Cartesian epoche, a form of systematic doubt which calls into question the very givenness of that which appears, and the new method as that of phenomenological analysis which is yet to be explicated. There is, however, an always present problem: to consider that which supports or that which makes possible all 'natural', mundane cognition as something transcendent to consciousness, something which in principle remains wholly inaccessible to consciousness, and then a transformation (*metabasis*) of one into the other seems inevitable. "The *metabasis* is so exceedingly dangerous, partly because the proper sense of the problem is never made clear and remains totally lost in it, and partly because even those who have become clear about it find it hard to remain clear and slip easily, as their thinking proceeds, back into the temptations of the natural modes of thought and judgement as well as into the false and seductive conceptions of the problems which grow on their basis." [IP. 32] Without focusing in these lectures on Cartesian literary imagery, he nonetheless echoes the same sentiments expressed in the First Meditation, and though it may be

unintentional, his style plays on the notions of sin and grace in its use of terms like temptation, seduction and being totally lost.

It seems as though the phenomenological procedure, just like its ancestor Cartesian doubt, is never impervious to the recrudescence of further doubts and aporias, but must overcome each along the way towards a foundation which will permanently secure further enquiries from skeptical assault. It is the unique trait of philosophical conversion then, that it does not banish from the outset the occurrence of further doubts, that it must incessantly begin again. It is "hard labour", it requires "strenuous efforts"; the investigator is *naturally* inclined to fall away from this course, and here 'natural' is also to be taken in the literal sense. [See PP. 149] It is thus *unlike* religious conversion which arrives, or is visited upon the convertant with the unassailable guarantee that this new-found conviction does indeed have a transcendent (i.e. divine) origin. This sort of transformation does not exclude the irruption of temptations and seductions, but all such strayings from the path are known to be illusory and specious. It is a sad fact of fallible 'human nature' that we are always subject to them, but a mark of divine benevolence that they are only placed in our way to seduce us from what we already know to be the one and true way.

At the close of the First Meditation, the thinker is exhausted by the exercise itself and the constant struggle to keep his "habitual opinions" from interfering with the insights gained. "This is an arduous undertaking and a kind of laziness brings me back to normal life.... I happily slide back into my old opinions and dread being shaken out of them." [CSM II. 15] We have already indicated Descartes' repeated usage of the image of a difficult, awkward path along which the guide must contend with false trails, unexpected crevasses and intermittent darkness, where the best option is to remain still, not to rush about in a panic. In this way, one knows that one has at least reached *this point* in the chain of reasons. L. J. Beck's gloss on this passage echoes Husserl's remarks: "Methodical doubt is a dangerous exercise. It is in no degree astonishing that the *Discourse*, intended for a wide public, does not even hint at the final stages of the hyperbolic doubt. A philosopher with a modicum of moral responsibility does not carelessly provoke the *spiritual crisis* which is the end product of the real experience suggested to us, if that experiment is successful."¹⁹

¹⁹ L. J. Beck. *op. cit.* p. 74.

This oscillation between the natural and the unnatural attitude, the loss of bearings engendered by the inception of doubt and the reduction, is signalled by the phrases "remain lost", "become clear" — it signals the darkness which engulfs one when entering a new domain. This imagery tacitly plays on the peculiarly philosophical significance of the journey metaphor which we have isolated in the Evangelists' notion of *epistrophe*: to lose the world in order to gain it. This Husserlian transformation is effected on the ground of this world: one loses, strictly speaking, the *sense* of the old world naively taken just as it appears; and gains a new sense of the *same* world, but now purged of prejudices and presuppositions. Let us (again) carefully segregate this notion from the Cartesian rhetoric of loss and gain; for one of the presuppositions which Descartes explicitly accepts and which Husserl rejects is the natural *scientific* model for philosophical explanation. Thus Descartes will *replace* prior theoretical constructions with a new model whose subsequent articulation (e.g. in the *Principles*) applies to an entirely new world, and not a new sense of the same world.

This distinctively philosophical significance has perhaps floated beneath the surface of previous discussions, but makes its first overt declaration in *Ideas: First Book* (1913). In section 50 of Chapter Two, the author harkens back to the introduction of the phenomenological reduction in sections 31-33 of Chapter One. With respect to the 'putting out of action' through the epoche, the whole world with its physical things and living beings is excluded, but the theoretical regard which makes this possible reveals a residuum. "Strictly speaking, we have not lost anything but rather have gained the whole of absolute being which, rightly understood, contains within itself, 'constitutes' within itself, all worldly transcendencies." [Ideas I. 113] In the natural attitude, we simply effect or perform the acts in virtue of which the world is there for us. Through the epoche, instead of living in these acts, instead of effecting these acts, we effect acts of *reflection* directed towards them. We are now living in acts of the 'second degree', acts whose basis is the infinite field of mental processes.

In a textual revision from 1929 of the earlier passage, the author presents a similar exegesis of what remains within the parentheses when the epoche takes place. The phenomenological reduction suspends:

Our existential acceptance of the objective world as existing, this sphere of 'immanent' being does indeed lose the sense of being a real stratum in the reality belonging to the world and human being (or beast), which is a reality already presupposing the world.... But it is *not simply lost*; rather, when we maintain that attitude of epoche, it *receives* the sense of an absolute sphere of being, an absolutely self-sufficient sphere, *which is, in itself, what it is*.... [ibid. 65, note 17, emphasis added; cf. also CM. 36]

From the 1931 lectures on "Phenomenology and Anthropology", he brings this loss/gain opposition directly into discussion of both the Cartesian origin of 'scientific' radicalism and the necessary first-person attitude of one who wishes to philosophise in an entirely new way. Here Husserl asserts that all modern philosophy originates in Descartes' *Meditations*, insofar as every genuine beginning of philosophy issues from solitary reflections. In this condition, it is incumbent on me to accept only what is evident to me and pursue the source of this evidence beyond the level at which others regard such claims as 'scientifically' grounded. The level at which others cease their questioning coincides with the presumed existence of the 'objective' world. Presumed on the basis of what? My experience of worldly realities? But these experiences are open to illusion; some perceptions are so dubious that the certitude already taken for granted is cancelled. What is the status of the evidence with which I accord the being of the world lying-over-against me? In order to answer this, in order to step back and see what constitutes an experience as such, it is an "obligation to practice a universal epoche". [HSW. 317-20]

But what remains after this? Do I who invoke the epoche disappear, am I also put out of action? Husserl adroitly paraphrases Descartes' robust rejoinder to the malign demon: "Let the existence of the world be questionable for me now because it is not yet grounded, let it be subject to the epoche; I who question and practice the epoche, I exist nonetheless." The first level of the reduction places brackets around the mundane, empirical ego and discloses the transcendental ego as logically prior to the world's being. Descartes and his followers "remained blind" to what lay before them and *turned back* to the 'scientifically' grounded world. What lay before them is "a unique entrance to this new realm", one which is reached via the second level of the reduction, which asks what constitutes this transcendental ego. One vital discovery is that whatever belongs to the world, including my own worldly being, exists for me only as the intentional content of experiential apperception or self-reflection. This reflection on a

'second-order' ego shows that I alone am the absolutely responsible subject for whom other subjects in the world and their worldly ways-of-being have existential validity.

This absolute position above everything that is or might ever be valid for me, including all its possible content, is necessarily the position of the philosopher. It is the position which the phenomenological reduction assigns to me. I have *lost nothing* of what existed for me in the naive attitude, nothing in particular whose real existence was shown. In this absolute attitude, *I know the world itself*, and know it now, *for the first time*, for what it always was and had to be by its very essence: a transcendental phenomenon. [ibid. 320, emphasis added]

In the lectures to the Sorbonne in 1929 which became known as the *Cartesian Meditations*, Husserl opens his exposition of the eternal significance of this text by citing it explicitly in terms of a radical new science and method. "Their study acted quite directly on the *transformation* of an already developing phenomenology into a new kind of transcendental philosophy. Accordingly, one might almost call transcendental phenomenology a Neo-Cartesianism." In these lectures he is, of course, entirely committed to the Cartesian way into phenomenology, although as early as *Erste Philosophie* (1923/24) he had begun to be disenchanted with this approach and thought of it more as "the history of a shipwreck", a metaphor which itself is an extension of the journey motif. One of the features which makes the *Cartesian Meditations* more accessible, more readable than many of his other works is their lecture format. Here the Introduction adroitly plays on the meaning of 'radical', showing a skilful rhetorician's isolation of key terms, called up again and again to reinforce the message. His closing remarks are in the form of a series of queries, the announcement of a *calling* for conversion.

Must not the only fruitful renaissance be the one that reawakens the impulse of [this text]: not to adopt their content, but in *not* doing so, to renew with greater intensity the *radicalness* of their spirit, the *radicalness* of self-responsibility, to make that *radicalness* true for the first time by enhancing it to the last degree, to uncover thereby for the first time the *genuine sense* of the necessary regress to the ego, and consequently to overcome the hidden but already felt naiveté of earlier philosophising? [CM. 6, emphasis added]

Husserl consistently manipulates an ambiguity in the meaning of 'radicalness' -- that it pertains to the root or basis of any genuine philosophy, and that it is a thorough, even violent, overthrow of

previous traditions. However, this surface ambiguity conceals a deeper univocalness, that the only responsible overthrow must begin at the very basis which previous thinking has assumed. We can say that this overthrow is carried out along three axes: the reflecting ego who initiates it, the world transformed thereby, and the 'science' which articulates this transformation. At the close of the lectures, Husserl returns to one source of this potential ambiguity regarding the ground upon which this radical change must be predicated. "Philosophy after all demands an elucidation by virtue of the ultimate and most concrete essential necessities; and these are the necessities that satisfy the essential *rootedness* of any objective world in transcendental subjectivity and thus make the world intelligible concretely *as a constituted sense*." [CM. 137] If this passage traces the world-axis of radicality, and the delineation of the transcendental ego the personal-axis, in the closing pages, he picks up on the third axis, that of the '*scientific*' description of the unified ego-world conversion. The path which leads to an absolutely grounded knowledge is the path of universal self-knowledge. Such a path is the continuation of Cartesian meditations conceived as an all-encompassing and self-accountable 'science', i.e. *a mathesis universalis*. [ibid. 156]

The specific contributive senses of this threefold rootedness can be spelled out in phenomenological terms. The new world is uncovered through the reduction which brackets the general thesis of the world's being and thus discloses an entirely new realm of sense. The transcendental ego has universal a priori features in virtue of which it is prior to the ground of the world's being; the reflective phenomenological self is usually spoken of as a disinterested observer, "above this life, above these actions." These remote orbital images which occur throughout Husserl's writings signify a peculiarly *ascetic* orientation towards phenomenology as a vocation, a vertical profundity in keeping with Descartes' avowal of a quasi-monastic attitude towards doing philosophy as a personal calling. This motif will be picked up again in our discussion after its most explicit evocation in the *Crisis*.

The descriptive science of transcendental phenomenology must be without ontological or metaphysical presuppositions, abide by the principle of principles (to only take what is given precisely as it is given), and orient itself towards the ideal of an eidetic discipline concerned with the essential structures of consciousness and its correspondent regions of being. If anything it is this third axis of a

rigorous eidetic science which distinguishes philosophical from religious conversion, at least in terms of a metaphysics *devoid of theological overtones*, as Descartes' or Leibniz' wasn't. In the religious sense of conversion, there is no need to *account for* the transformation of ego and world, whereas in the philosophical sense, it is absolutely requisite since making intelligible this radical change *constitutes the raison d'être* of First Philosophy as a Phenomenology of Reason.

Husserl's exposition of this eidetic science in his lectures on *Erste Philosophie* involves the rehabilitation of the Cartesian notion of a *mathesis universalis*, in terms which emphasise its rootedness in the most fundamental questioning. "First Philosophy is the science of method in general, of knowledge in general, and of possible goals of knowledge in general... in which all a priori sciences that have disconnected all types of the contingent... show themselves to be *branches* which have developed from *one and the same science*. A *mathesis universalis* stands above all sciences as a mathematics of knowledge achievements." [HUS VIII. 249] This statement serves to isolate the peculiar systematic endeavour which pertains to the theoretical elucidation of ego and world, and in its distinct concatenation of phrases is closely linked to Descartes' arboreal image in the Preface to the *Principles*.

The First Part is devoted to First Philosophy or metaphysics whose essential themes had already been traced in the *Meditations*; the Second and Third, to the physical laws of the heavens and earth; the Fourth, to the physical and chemical laws of animals and humans. "The whole of philosophy is like a tree. The roots are metaphysics [i.e. first philosophy], the trunk is physics,, and the branches emerging from the trunk are all the other sciences." [CSM I. 186] His description of what is embraced in this unified science harkens back to his formulation of a *mathesis universalis* twenty years earlier in Rule IV: "A general science which explains all the points that can be raised concerning order and measure irrespective of the subject matter." [ibid. I. 19] Such a science was also famously the obsessive goal of Leibniz' work on the rational calculus, which he also called *mathematique universelle*. At the end of the Prolegomena, it is Leibniz' model which Husserl cites prior to his own demarcation of the formal, a priori theory of theory construction, the necessary form of theory as such, in Chapter 11. Although he had abandoned such a working hypothesis in the *Crisis*, it is still considered a vibrant and realisable ambition in *Erste Philosophie* and *Formal and Transcendental Logic*.

Husserl's earliest formulation of *mathesis universalis*, the root notion of the most primordial discipline, focuses on the unity of two disparate dimensions in metaphysical enquiry. "It can be understood as an inter-connection of the things to which our thought experiences (actual or possible) are intentionally directed, or on the other hand, as an inter-connection of truths, in which this unity of things comes to count objectively as being what it is." [LI. 225] This unification then is predicated on the merger of what he will later call the *order of beings* and the *order of cognitions* (or in the *Ideas*, *ordo rerum* and *ordo idearum*). This, of course, is more than a chance echo of Descartes' order of essences and order of reasons, though it is fruitless to speculate on whether Descartes envisaged his universal science as the syncretism of these orders. But for Husserl, this yields the most foundational (or the most abstract) conception of all: the *eidos* or ideal essence of theory as such. Just as the justification of a concept, i.e. of its conditions of possibility, is achieved by returning to its intuitive or deducible essence, so the justification of a given theory demands that one return to the essence of its pure form alone. Categorical (or later, eidetic) insight into the pure form of theory as such reveals formal laws which regulate, in a priori deductive fashion, every specialisation of the essence of theory in all its possible kinds. "We are dealing with systematic theories which have their *roots* in the essence of theory, with an a priori, theoretical, nomological science which deals with the ideal essence of science as such." [ibid. 235]

This specific exegetical 'zig-zag' which Husserl himself called "backward glancing reinterpretation" leads us back to his repeated attempts in *Erste Philosophie* to find the grounds for such a formal a priori theory *construction* within the purview of phenomenology as a theory of transcendental subjectivity. It is not enough to stipulate the 'objective' grounds as conditions for the possibility of an eidetic science of consciousness without taking account of what it means for consciousness to have its own grounds for thematizing that particular activity. Again and again, Husserl re-engages the question: what would be the motive (i.e. subjective ground) for initiating the phenomenological reduction? This motive and its subsequent legitimisation cannot be found in the natural attitude which strives to knowingly establish a basis for norms governing practical life and its interests.

Only when these interests have been given up and one has adopted the 'unnatural' attitude of a disinterested observer would one then be *motivated* to proceed towards an absolute and universal

foundation. But this seems to skip over entirely the issue of the transition from one attitude to the other. "Only through the *free act* of holding back judgement, of willingly freeing myself from this primordial co-interest [in the natural world] can that attitude... come into being. [However,] a particular motivation must release me from this sympathy.... What can serve here as a motive?" [HUS VIII. 92] Husserl here points towards the personal decision on the part of the absolute beginner, in his fullest freedom, to realise a complete transformation of both self and world – and that means nothing less than responding to a call for radical conversion.

The root-sense of the radicality (*radix*) of conversion is thus at the root or basis of any genuine philosophical activity. A radical reconception of its task, in the sense of a violent overthrow, can only be accomplished at this level – a fundamental and incontrovertible starting point. Husserl thus shares with Descartes the conviction that a new rethinking of the world must take shape as First Philosophy, a mathesis of irreducible principles.

Consciousness is the *root*, the source of all else that is called being.... It is not a unity of multiplicity; it does not refer to something further, from which it could or must have been derived. All other being is precisely unitary and points mediately or immediately back to the absolute flow of consciousness. If the flow of consciousness *is* in accordance with *its* mode of being, then everything else, whatever it might be, *is* also. Nothing further is required.... This state of affairs justifies our designating the *root-giving* consciousness as absolute consciousness. [1908 ms.]²⁰

First Philosophy then is the Phenomenology of Transcendental Subjectivity, the absolute consciousness which is always prior to any other psychical activity and the worldly correlate which it otherwise presupposes. Second Philosophy is Metaphysics in the Cartesian sense, still tied to the natural thesis of the world's being and the natural sciences as its theoretical paradigm [CM. 139] This does not mean that Second Philosophy is condemned to being some sort of spectral twin to the empirical sciences of psychology, sociology, anthropology, etc. which would certainly undercut the validity of demarcating the third way as phenomenological, descriptive psychology. Rather, the a priori structures and logical forms revealed through the eidetics of First Philosophy are presumed to obtain in metaphysical enquiries

²⁰ Bernet, Kern & Marbach. *op. cit.* p. 57

in Second Philosophy. The Kantian project of a transcendental derivation of a priori principles is legitimate only from the first to the second level -- it makes no sense to speak of a derivation of such a priori features *from* anywhere else. Beyond (or before) the absolute priority of consciousness to world, *there is nothing else*. Husserl speaks here of the "irrational fact of the rationality of the world". The ineluctable fact that actuality corresponds with the theoretical and practical ideals of reason is the object and theme of a new metaphysics. [HUS VII. 188]

This phrase -- "the irrational fact of the rationality of the world" -- is extremely resonant, especially in the context of radical conversion. The beginning philosopher, having eschewed all theoretical preconceptions, can never *derive* his motive for performing the phenomenological reduction, for engaging in philosophical activity, as though it were the conclusion in a dynamic syllogism whose premises were metaphysical principles. Before and above all else, his motive springs from an act of will in his fullest freedom, confronting the radical contingency of this irrationality. However, insofar as his purpose is to extend the horizons of the clearly intuited rational world, he makes of this a necessity, rigorously obeying the principle to take *what* is given only *as* it is given. The philosopher's conversion is thus entirely his own responsibility, open to endless corrections and revisions, and adheres to rational explication. In contrast, one could say, the religious convert, confronted with this irrationality, abdicates responsibility to the divine presence; has no need of correction since the message (*kerygma*) is already fixed, though he may be ignorant of some parts; and abjures explication in favour of other-worldly salvation.

For the philosopher, it is thus not a matter of *apprising* himself of the facts in the case, as though it were a puzzle whose answer was hidden somewhere -- it is a matter of *surprise* (Platonic wonder) that the world appears just this way and not otherwise. As long as this attitude of surprise is maintained one is less likely to fall into the trap which the world sets for your thought (as Kafka said) -- "Look here, it's just as you imagined it would be." Another way to put this is: insofar as the philosopher empirically considers the world's connection with mind, it will always be the case that the world looks just like the philosopher's terms describe it to be. This should remind one of Hume's remark that Berkeley's proofs for god are irrefutable but carry no conviction. There isn't anything else against which

a "bridging theory" of the mind's knowledge of the world could be adjudicated. What is it about consciousness and the world such that this egregious fulfilment would always come about? One way to answer this question would be to look at the various frameworks in which thinkers articulate their conceptual vocabularies; e.g. Foucault's archaeology of knowledge, or a taxonomy of philosophical discourse. Since it is not possible to ask what the world would be like disengaged from consciousness, another approach to this question would be: what would consciousness be like disengaged from the world? This disengagement is the phenomenological epoche and the domain disclosed thereby is the only proper subject of a transcendental philosophy.

The transformation of world-meaning is effected by the reduction, the personal transformation of the self is motivated by the philosopher's free action in the face of the world's ineradicable contingency, and the transformation of the descriptive science which accounts for this is the result of sublating (*aufgehoben*) the material ontology of nature for formal eidetic science. For Descartes the engine of universal doubt has to be engaged only once (*semel in vita*); the purgative is so thorough that no further skeptical doubt can creep back in. Perhaps this is why he remarked that one should not indulge in metaphysical speculation more than a few hours a year (!). For Husserl, on the other hand, the epoche has to be actualised again and again, never ceasing to start the project anew.

In this sense, he speaks in the *Crisis* of the *vocation* of phenomenology, a term reserved, strictly speaking, for a priestly mission, since it plays on the notion of a call or summons. Another reason is that, in Descartes' scheme of things, god secures the entire validity of the enterprise, from which one cannot fall away, though one may be tempted. Just as a religious person would never say that he could be deconverted from faith to atheism, but only reconverted from one faith to another. But for Husserl, there is no transcendental guarantee of the knowledge achievements made possible through the reduction. It is "hard labour" and "strenuous efforts" are needed to maintain what is, after all, a highly unnatural orientation.

The mention of "strenuous efforts" should alert the reader to the peculiarly *ascetic* character which seems to attach to Husserl's summons to conversion. There is an almost *penitential* overtone to his

references to "the way of the cross of corrections and revisions" [PP. 95]²¹ -- a very potent rhetorical trope. At once it signifies both the highly idiosyncratic manner in which Husserl practised phenomenology, i.e. constantly revising previous material and rarely expressing satisfaction with the results, and the fact that he considered this to be an intrinsic, unavoidable burden. "Large parts of the publications Husserl produced in his lifetime... look like purely momentary states of rest, or condensations, of a thought movement that was constantly in flux and which can be followed precisely only in the mss."²² These *Nachlass* are more philosophical monologues than finished treatises and vividly reflect the process of composition: ceaselessly calling into question and criticizing prior statements, tentatively striving forward, and then retracting in order to strike off in another direction. It reflects also his extremely analytic, but *non-systematic* style of thinking -- no system was envisioned in advance of individual efforts in specific problematics. This distinctive process of correction and revision is comparable to an explorer's charting of new territory; repeated forays make possible the adjustments needed for an accurate map.

The strenuous efforts peculiar to the philosophical explorer seem to call for certain types of self-denial reminiscent of Descartes' quasi-monastic precepts. The sort of reflection attendant on the thematization of pure consciousness disengaged from the world, bracketed by the reduction, are a *sine qua non* for further analyses. "They are necessary in order that, in the face of our *poverty* in which... we are vainly *fatiguing* ourselves, it may at last become clear that a transcendental investigation of consciousness cannot signify an investigation of Nature." [Ideas I. 115] "It is a long and thorny way starting from purely logical insights" to arrive at an intuitive understanding of the a priori relations of consciousness. "If the right attitude has been won... if one has acquired the *courage to obey* the clear

²¹ In addition, cf. also: "In advance 'world' has the meaning 'the universe of the *actually* existing actualities': not the merely supposed, doubtful or questionable actualities, but the actual ones, which as such have actuality for us only in the constant movement of corrections and revisions of validities." *Crisis*. 146; and "Scientific reason [is] a reason that actualizes genuine cognition by an unremittingly concomitant criticism of cognition." *FTL*. 128.

²² Bernet, Kern, Marbach. *op. cit.* p. 245.

eidetic data with a *radical lack of prejudice*... then firm results are directly produced." [ibid. 212; emphasis added]

The *Cartesian Meditations* even more overtly plays on these ascetic features attaching to the pursuit of phenomenology. Anyone who seriously intends to philosophize must overthrow all that has been uncritically accepted and acquire knowledge as entirely one's own achievement. "If I have decided to live with this as my aim... I have thereby chosen to begin in *absolute poverty*, with an absolute lack of knowledge." [CM. 2] Obedience to the principle of only taking that which is given precisely as it is given is expressed in this manner: "The realm accessible to transcendental self-experience... must be explored, and at first, with simple *devotion* to the evidence inherent in the harmonious flow of such experience." [ibid. 29] The description of the disinterested observer, above the naively involved self, elaborates the essential *purity* of this mode of reflection. [ibid. 35; emphasis added]

It is in the *Crisis*, however, that the strictures incumbent on the phenomenological orientation receive their most pronounced expression. The philosophical conversion toward this attitude, away from the empirical sciences of nature, reveals not only the truths of this new world-meaning, but also seems to indicate a transformation of the philosophical self. The statement of this attitude is a direct descendant of the 1906 diary entry (see Chapter 6), that the pursuit of absolute clarity is "a matter of life and death".

Through the epoche a new way of experiencing, of thinking, of theorizing, is opened to the philosopher; here situated *above* his own natural being and *above* the natural world, he *loses nothing* of their being and their objective truths and likewise nothing at all of the spiritual acquisitions of his world-life or those of the whole historical communal life; he simply *forbids himself*... to continue the whole natural performance of his world-life. [Crisis. 152]

One could not wish for a more straight-forward expression of the "vertical profundity" which typifies the German transcendental spirit, the "vertigo of great depths" (in Gilson's phrase) which inspires such utter dedication to an abstract truth.

The vocational character of the phenomenologist's attitude does not, however, preclude other practical interests, but instead all such worldly interests -- religious, ethical, aesthetic, etc. -- become themes for reflection. In this context, Husserl invokes a well known metaphor, equating religious with philosophical conversion: "the total phenomenological attitude... [is] destined in essence to effect, at first, a complete personal transformation, comparable in the beginning to a religious conversion, which then however, over and above this, bears within itself the significance of the greatest existential transformation which is assigned as a task to mankind as such." [Crisis. 137]

It is very easy to misconstrue this passage, to take it to mean that someone converted to phenomenology has some sort of privileged access, denied to one who has not undergone this transformative experience; as though the "seeing" attendant on the epoche was some sort of esoteric "sixth sense". It is not the case of the blind being made to see, or Berkeley's sight-restored patient asked whether he could now identify the visual object as the touched object -- here the naively perceived object with the reduced 'object'. Rather, it is a demand to see more clearly and distinctly what was given before in an obscure and confused way. And it is like a religious conversion only "at the beginning"; it is an attitude which can never be taken for granted. There is no divine *grace* here, by virtue of which one is held or suspended before the splendour of the created world. One has to suspend the old world in order to attain the understanding that the world is entirely the product of sense-giving, creative activity. So perhaps there is at least a divine light, or *light of reason*, within which this revelation takes place.

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