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Pascal: A Philosophy of Experience

Jennifer Yhap

A Thesis

in

The Department

of

Philosophy

Presented in Partial Fulfillment of the Requirements
for the degree of Master of Arts at
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ABSTRACT

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Jennifer Yhap

In this reading of the Pensées, we attempt to grasp the Pascalian system of thought as a Philosophy of Experience. Our method of exposition relies upon the distinction of ideas in the Cartesian context, for we argue that the idea in the material sense is the veritable principle for the ascertainment of extra-mental reality. The argument is based on the actuality of conception itself. We then proceed to analyse and situate the concept in terms of dispositional categories of understanding, that which we deem the Pascalian modes of intellection. Hereafter ensues an amplification of each category, a description of their agency and most particularly, their relation to the ontological order of the body. Finally, we argue that it is the ontological order of the body which is the guarantor of the veracity of our ideas of the world. In a word, the actuality of the idea in the material sense implies the order of the body as necessary for a true understanding of things. This is the Philosophy of Experience in the Pensées of Pascal.

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Introduction

What is the source of ideas proper to the employment of human understanding? Might one argue, as Descartes has done, that the source lies within the realm of reason itself, of subjective self evidence, of the immaterial substance entitled Cogito, a substance whose very essence is to think and whose nature is believed necessarily distinct from that of any physical body (Principes I, 8); or must the source be found in the world, in the perceived and sensed elements of the extra-mental world, in the making use of a material substance called 'body'? Such is the question being posed in the present study of Pascal, the study of a series of fragments entitled Pensées.¹

The Pensées of Pascal do not constitute a philosophy in the usual acceptance of the term. It may even be persuasively argued that Pascal has no philosophy to speak of, due not only to considerations of textual lacunae but primarily from the observations of Pascal himself on the nullity of philosophic endeavour. After all, was it not Pascal himself who wrote, "...nous n'estimons pas que toute la philosophie vaille une heure de peine"(79). And yet without denying his original judgement avowing the nullity of philosophic endeavour, the careful reader need not be dissuaded from embarking upon an exegesis of Pascal based on the options and methodology offered by philosophy itself. The apparent conflict which exists between the stated confession of philosophic

¹ Blaise Pascal, Pensées et Opuscules, ed. L. Brunschvicg (Paris: Librairie Hachette, 1945). In the present study, all references to the fragments of Pascal are made consistent with the numeration of this edition.

nullity on the one hand and the present affirmation concerning the need for a new and detailed exegesis of the texts on the other disappears as soon as one is able to discover in the thought of Pascal less a systematic philosophy understood as a doctrinal whole, than a vision oriented toward the elucidation of the very foundations of philosophic thought. The focus of this vision is synonymous with the objectives of the present study: a delineation of the employment of human understanding relevant to the source of its ideas. In order to perform this task we must work with borrowed tools, using all available philosophic methods in order to reconstruct the veritable nature of his thought.

A number of conditions relevant to the present thesis are found in a fragment by Pascal on the nature of contradiction:

Contradiction. -- On ne peut faire une bonne physionomie qu'en accordant toutes nos contrariétés, et il ne suffit pas de suivre une suite de qualités accordantes sans accorder les contraires. Pour entendre le sens d'un auteur, il faut accorder tous les passages contraires (684).

Upon close observation of the text, there is disclosed one theme which may serve as the salient heuristic principle of the study: it is the notion of "physiognomy", a physiognomy detailed along the lines of a structural or topographical plan as this plan is manifested through the most powerful ideas and images of a work; a strictly rational physiognomy which seeks to entertain and comprehend the employment of thought itself, its powers and organisation insofar as each allows access to a true understanding of an intentionality operating between a rational subject

and the extra-mental world; in a word, a physiognomy which entails the processes of intellection in concert with evidence received from the world of things as they are in themselves. For the careful reader of Pascal, this notion of physiognomy gives access to a multiplicity of pathways permitting rational intercourse between a thinking subject and things of an extra-mental world. Each of these pathways is a form of unity which establishes a condition of rationality for the understanding of an object of knowledge. As such, they may be entitled modes of intellection.

Particularised through the act of understanding, these forms constitute the basis for the future elaboration of an understanding of things insofar as these things may be considered formally present to the subject; they are modes of intellection which organise all possible knowledge of self and of the world through the employment of abstract forms or intentio rei² originating in the thing as it is in itself. There are five such modes of thought in Pascal: le coeur, la pensée, la raison, la coutume and l'instinct. For the purposes of consistency and clarity, the following English equivalents will be substituted throughout the study: the heart, intellect, reason, custom and instinct.

Pascal offers the following description of the nature and agency of

² E. Joos, "Intentio Rei or Intentio Intellectus: An Attempt to Determine the Metaphysical Implications of Intentio in the Philosophy of Saint Thomas Aquinas", Unpublished essay, 14. Intentio rei is here stated to represent the "res naturae in toto". It is the substance of the thing as perceived by the intellect, that is to say, an intellectual substance.

heart as an epistemic reality: "Nous connaissons la vérité, non seulement par la raison, mais encore par le coeur: c'est de cette dernière sorte que nous connaissons les premiers principes, et c'est en vain que le raisonnement qui n'y a point de part, essaye de les combattre" (282). Heart, therefore, is the source of all first principles of understanding, an understanding necessarily implicated in the true and certain knowledge of the world. Contiguous to the notion of heart lies the notion of intellect. It is possible to discern in Pascal two employments of the term: first, as individual thoughts specified in the following passage, "En écrivant ma pensée, elle m'échappe quelquefois..." (372), but moreover in terms of processes of thought of a synthetic nature. This second usage is affirmed in the following justly famous passage: "Roseau Pensant. -- Ce n'est point de l'espace que je dois chercher ma dignité, mais c'est du règlement de ma pensée. Je n'aurai pas davantage en possédant des terres: par l'espace, l'univers me comprend et m'engloutit comme un point; par la pensée, je le comprends" (348). Comprehension here represents a synthetic function of understanding, the ability to encompass and coordinate in unity a disparate group of entries which belong to different ontological orders, namely the sensual and the intellectual.

Reason, on the other hand, is the ability or power to think discursively: it is ratiocination or raisonnement, the focus being one of analytical rather than synthetic thought. This employment of the term 'reason' to signify ratiocination is made clear in the fragment cited above concerning the nature of heart, for as the editor of the text has observed with much acuity (282 note 1), in the original manuscript the

term 'raisonnement' is a later substitution for the term originally dictated by Pascal, that is, 'raison'. Reason therefore may justifiably be assumed to signify the power of discursive thought: it is the ability of the human understanding to think argumentatively along purely logical lines. There thus exists within the thought of Pascal a fundamental difference between the power of reason and the power of heart, and this not so much at the level of their respective objects of knowledge but rather at the more profound level of their employment as powers or acts of human understanding. This difference, however, does not imply pure opposition. Rather, one observes in the thought of Pascal a complementarity of operations between the two powers, a complementarity most evidently stated in the following passage: "La mémoire, la joie, sont des sentiments; et même les propositions géométriques deviennent sentiments, car la raison rend les sentiments naturels et les sentiments naturels s'effacent par la raison" (95). The nature of this complementarity will be elucidated in the third chapter, wherein the notion of heart and the notion of reason will be made fully clear.

Concerning the rational agency of custom, we may cite the following text of Pascal:

Qu'est-ce que nos principes naturels, sinon nos principes accoutumés? Et dans les enfants, ceux qu'ils ont reçus de la coutume de leurs pères, comme la chasse dans les animaux? Une différente coutume nous donnera d'autres principes naturels, cela se voit par expérience; et s'il y en a d'ineffaçables à la coutume, il y en a aussi de la coutume contre la nature, ineffaçables à la nature, et à une seconde coutume. Cela dépend

de la disposition (92).

Pascal likewise wonders in the succeeding fragment, "Mais qu'est-ce que nature? Pourquoi la coutume n'est-elle pas naturelle? J'ai grand peur que cette nature ne soit elle-même qu'une première coutume, comme la coutume est une seconde nature" (93). Custom, therefore, is habit. It is the understanding one gains of things of the world in their empirically ordered state.

Distinct from custom is the intentional activity of instinct. Pascal deems "Instinct et raison, marques de deux natures" (344) and likewise in an equally short fragment he conjoins three natures: "Coeur, instinct, principes" (281). But perhaps the best example of his thought on the nature of instinct is found in the fragment previously cited on the nature of reason and heart, for therein is noted the limits of reason:

Cette impuissance ne doit donc servir qu'à humilier la raison, qui voudrait juger de tout, mais non pas à combattre notre certitude, comme s'il n'y avait que la raison capable de nous instruire. Plût à Dieu que nous n'en eussions au contraire jamais besoin, et que nous connussions toutes choses par instinct et par sentiment! Mais la nature nous a refusé ce bien; elle ne nous a au contraire donné que très peu de connaissance de cette sorte; toutes les autres ne peuvent être acquises que par raisonnement (282).

Instinct, then, is not an irrational adjustment of the subject to the object. Its nature appears at once to partake in a physical response to the appeal of things, and in the intuitive through the immediate grasp of things in the world. It is an intuition, not of first principles, but of

first effects. Thus, the activity of instinct is similar to the activity of heart and the first principles of intuition to the extent that it comprises an immediate perception of an object of knowledge, an immediate perception, however, not of first principles or causes of objects of knowledge but rather of the primary effects of things upon the knowing subject. These are the five pathways for the understanding of things in the world.

In consideration of the nature of each form or mode of intellection, we discover in the thought of Pascal a series of notions which cannot be included in the ledger of metaphysical and ontological studies but must remain at the more accessible level of physics and nomology. The word 'physics' is being used in the sense of the presocratic cosmologies, that is to say, as a notion directed toward the speculative understanding of the nature of things pursuant to their material characteristics as discovered through experience (Capaldi et al., 27). However, there is this important differentiation to be made between the presocratic usage of the word and the one presently intended for Pascal. The presocratic cosmologies were searching for a "material" principle or element which underlies, encompasses and explains all being in its various experiential manifestations, traditionally the four elements of fire, water, air, and earth; on the contrary, with regard to the thought of Pascal, it is the formal evidence of the rational process in and of itself as it relates to things of the extra-mental world which is to be conceived and comprehended. The notion of physics to which we are currently referring is nothing other than the ancient physis or process of material change as it is analogously applied to the noetic activity of the ideas themselves.

-- their movement and power as they are diversely manifested within the fivefold pathway of the rational life of the subject -- as the subject communicates with objects of the world. To the extent, therefore, that the physics of rational life furnishes the motive toward the articulation of the thing as intentionally present to the subject, it constitutes the coherent directive which lies at the very centre of the multiple forms of thought as modes of intellection. Physics or physis, according to its present employment, is the study of the presence of objects to the subject insofar as the material thing is rationally manifest to the subject.

Nomos or nomology has to do with laws or conventions instituted for the purpose of understanding and explicating the reality of the physical world, or ancient physis (Kerferd). At the level of noesis, the notion of nomology operates in concert with the notion of physics in a bipolar manner. To the extent that physics endeavours to discover the formal reality of things consonant with the noetic process it is a coherent directive aimed at the categorial structure of knowledge, this latter pertaining especially to the notions of heart, reason and intellect, whilst nomology reasons upon the conventions of thought as such thought may be understood through its particular articulations, that is to say, the notions of custom and instinct. These two operational directives of physics and nomology seek to elucidate the manner in which an object as formal reality may come to be known to a thinking subject. They determine both the process as well as the rational application of principles to particular cases.

With these clarifications in mind, there is only one element missing in the chain of interpretation: the notion of body. The body is above all the physical organism of man; to this extent, it has no direct relation with the rational physiognomy of the thesis. However, there does exist another acceptation of the word, an acceptation in which the word 'body' is understood rationally as material object of knowledge, for it is the body which houses the human senses. Indeed, there is no physiognomy without sense perception. Its primary nature is being, that is to say, a material reality which, as necessary medium of all intentio rei, is the physical element necessarily implicated in the cognitive process of a rational being. With the Pensées of Pascal, we are witness to the rehabilitation of the body as a notion necessary to the employment of human understanding.

Thus, in response to the question concerning the origin of ideas, we henceforth define Pascalian thought as situated squarely in the second of the two possible alternative positions: it is necessary, for the true understanding of things, that the body be cited as the primary element in the epistemic relation of subject and object. In order to effectuate this task, it is likewise necessary to grasp the multiplicity of pathways which are implicated in the correct appropriation of the thing as object of knowledge. It is through the proper grasp of the multiple pathways of understanding that the body will be revealed as the essential constitutive element of all cognitive processes involving the totality of beings; that is to say, the sensual and the intellectual orders.

Chapter One

"Pensée fait la grandeur de l'homme"

Pascal professes the belief that thought constitutes the greatness of man (346). It is therefore with a clarification of the idea itself that we must begin the study. To do so will entail a close analysis of the speculative principle of knowledge inherent in the "material" manifestation of the intelligible element; in a word, we must deal with the physics of rationality. And this must be done not only with respect to the thought of Pascal himself, but also to the philosophy of Descartes whose thoughts were dominant at the time of Pascal. The acceptance of this procedure will enable the Pascalian reader to elaborate a cogent theory of ideas based upon the Cartesian system. With this in mind we shall employ as primary text the Principes³ of Descartes, to be supplemented with appropriate excerpts from the Méditations⁴. The former work has the advantage of presenting in systematic form all of the major elements of the Cartesian programme; further, it comprises a work with which Pascal appears to have been fully conversant (LeGuern 85).

Descartes begins the Principes with a definition of philosophy:

³ René Descartes, Principes de la Philosophie, ed. C. Adam and P. Tannery, (Paris: Librairie Philosophique J. Vrin, 1964) IX-2. References to the Principes are made in accordance with the numeration of the standard text. However, references to the preface will be made to the appropriate page number.

⁴ René Descartes, Meditationes de Prima Philosophia: Méditations Métaphysiques, ed. Geneviève Rodis-Lewis, trad. Duc de Luynes, (Paris: Librairie Philosophique J. Vrin, 1970). References to the Méditations will be made in accordance with the pagination of this edition.

...que ce mot philosophie signifie l'estude de la Sagesse, & que par la Sagesse on n'entend pas seulement la prudence dans les affaires, mais une parfaite connaissance de toutes les choses que l'homme peut sçavoir, tant pour la conduite de sa vie, que pour la conservation de sa santé et l'invention de tous les arts; & qu'afin que cette connaissance soit telle, il est nécessaire qu'elle soit déduite des premieres causes, en sorte que, pour estudier à l'acquerir, ce qu'on nomme proprement philosopher, il faut commencer par la recherche de ces premieres causes, c'est à dire des Principes; & que ces Principes doivent avoir deux conditions: l'une, qu'ils soient si clairs et si évidens que l'esprit humain ne puisse douter de leur vérité, lorsqu'il s'applique avec attention à les considerer; l'autre, que ce soit d'eux que depende la connaissance des autres choses, en sorte qu'ils puissent estre connus sans elles, mais non pas reciproquement elles sans eux; & qu'après cela il / faut tascher de déduire tellement de ces principes la connaissance des choses qui en dependent, qu'il n'y ait rien, en toute la suite des deductions qu'on en fait, qui ne soit très manifeste (Preface 2).

The text reveals three dominant factors of the Cartesian programme: the role of principles as effective agent of cognition between a thinking subject and its object, the psychological nature of evidence in the form of clear and distinct ideas, and the deductive-univocal form of argumentation. The present chapter will concentrate exclusively upon a specification of the first condition: the nature of principles as such principles may be said to constitute an adequate foundation for the correct judgement of things. We may obtain further clarification about

Descartes' system of thought if we turn to the Méditations:

Mais, Je réponds que dans ce mot d'idée il y a ici de l'équivoque: car, ou il peut être pris matériellement pour une opération de mon entendement, et en ce sens on ne peut pas dire qu'elle soit plus parfaite que moi; ou il peut être pris objectivement pour la chose qui est représentée par cette opération, laquelle, quoiqu'on ne suppose point qu'elle existe hors de mon entendement, peut néanmoins être plus parfaite que moi, à raison de son essence (7).

This latter text completes Descartes' statement of the Principes. What is most important to retain is not that ideas can be taken in two ways, namely "matériellement" and "objectivement", but that the idea taken objectively, that is, according to its essence does not presuppose the existence of the extra-mental as condition for its perfection. Editorial comments of the text help to clarify this position: "Descartes distingue donc l'idée comme fait de conscience général (materialiter) et l'idée comme réalité actuelle représentant tel ou tel objet. Cette réalité représentative de l'idée peut à son tour être considérée sous le point de vue formel ou sous le point de vue objectif"-(Méditations 7 note 1). We are forthwith given to understand the Cartesian materialiter as a principle of intra-mental significance: it is "...l'idée comme fait de conscience général...", an idea of consciousness and not of the thing.

This reading of the text elicits a positive response in the analysis of Chappell whose essay entitled "The Theory of Ideas" examines the Cartesian epistemology. "It is important to realize, however, that the relation that we have just been discussing, is very different from the

relation philosophers are wont to call by that name. Our relation [subject-object], the relation invoked by Descartes in the Méditations, preface, is wholly intramental" (192). Adhering to the Cartesian text, Chappell introduces the following terminology: the idea understood in the material sense (matériellement) and the idea understood in the objective sense (objectivement). "An idea in the material sense of the word is a mental act or event, something that occurs in the mind. An idea in the objective sense, by contrast, is something upon which the idea is directed, a mental object" (178). The present acceptance of the phrase 'idea in the material sense' defines the "materiality" of the idea in terms of an actuality of conceptual process. Attention is drawn toward the functional nature of the idea, the idea as "...act or event...". It is separate and distinct from the idea in the objective sense whose nature is that of an actualized content of perception: a "...representatum..." (Chappell 185).

Our case for a Pascalian theory of ideas maintains the assertion that knowledge of the thing is to be established upon the basis of the idea in the material sense. This idea is rendered explicit within the particularity of the material act of conception. It is the concept which is the principle for conceiving of the formal content of the idea, that is to say, the essence. Unlike Descartes, we propose the argument that Pascal's appropriation of the idea in the material sense achieves a true objectivity of thought: an objectivity not in the manner of the idea in the objective sense -- a representatum (Chappell 185) -- but more simply an objectivity characteristic of the thing. In a word, the Pascalian materialiter is of an extra-mental significance.

Textual support for this interpretation may be found in the following passage, wherein Pascal discourses upon the relation between the sensual and the intellectual orders: "Tout l'abuse; ces deux principes de vérités, la raison et les sens, outre qu'ils manquent chacun de sincérité, s'abusent réciproquement l'un et l'autre.... Mais outre ces erreurs qui viennent par accident et par le manque d'intelligence, entre ces facultés hétérogènes..."(83). Like Descartes, Pascal also employs the word 'principes' in his system of thought, but, this employment indicates an other set of exigencies: that of the senses. Hence the text of Pascal may be read as a criticism of the Cartesian theory of knowledge, for it maintains the existence of two separate orders of reality -- the sensual and the intellectual -- from which ensues a fundamental heterogeneity with respect to the origin of ideas. It is therefore necessary to carefully consider the fundamental distinction between the two theories of knowledge -- that of Pascal and that of Descartes -- in order to grasp the Cartesian usage of the terms 'material' and 'objective' in reference to the idea, for our aim is to set the difference between the two philosophers and then assert the truly Pascalian objectivity of thought based on the five categories: the modes of heart, intellect, reason, custom, and instinct.

We return to Descartes' position in his own words:

Puisque les idées mêmes ne sont rien que des formes, et qu'elles ne sont point composées de matière, toutes et quantes fois qu'elles sont considérées en tant qu'elles représentent quelque chose, elles ne sont pas pris matériellement, mais formellement; que si on les considérait, non pas en tant qu'elles représentent

une chose ou une autre, mais seulement comme étant des opérations de l'entendement, on pourrait bien à la vérité dire qu'elles seraient prises matériellement, mais alors elles ne se rapporteraient point du tout à la vérité ni à la fausseté des objets (4^e rép. A.T. IX, 180: lat. VII, 232, cited in Méditations 7 note 1).

When Descartes reasons upon ideas in their formal nature -- formellement -- he is referring to their ontological status. As a consequence, both the idea in the material sense as well as the idea in the objective sense may be termed 'formes'. By contrast, to reason upon their material nature, the idea understood matériellement, is to reason upon the actuality of conception as process.

Our reading of Descartes is sustained by the analysis of Gilson. In a work entitled L'Etre et L'Essence, Gilson clarifies the Cartesian theory of ideas in light of the influence of Suarez upon Descartes:

Le concept formel est l'acte lui-même par lequel l'intellect conçoit une chose, ou la notion commune que l'on nomme un concept; le concept objectif est au contraire la chose même, ou notion, qui est immédiatement offerte à l'intellect par le concept formel. Ainsi, le concept formel d'homme est l'acte par lequel nous concevons ce concept objectif qui est la notion d'homme incluse dans sa définition. Se demander ce que c'est que l'être, c'est donc chercher quel concept objectif correspond à ce terme dans la pensée. Or à tout concept objectif correspond un concept formel et inversement. Il s'agit donc pour nous de savoir quelle réalité l'intellect saisit et

exprime, lorsqu'il pense l'être comme tel (145-146).

That which Gilson terms 'le concept formel' is in fact the formal content of the idea, the idea as the formal constituent of the intelligible element. Its proper concern is the specification of the ontological status of the idea as intelligible content. At the level of functionality, this idea is made apparent through the agency of the material act of conception, "...l'acte lui-même par lequel l'intellect conçoit une chose...". Hence we are not mistaken in our conclusion: the idea in the material sense must evidence the material act of conception as the rational principle of the idea of things.

Conversely, we are able to discern the status of the objective idea with regard to the intentions of things:

Objective being, when the res cogitata exists in the mind, is simply being; it is just the kind of being that, by its nature, such a thing partakes of.... Objective being is the mode in which things in the intellect characteristically exist. This sort of being is contrasted with actual or formal being, which is the mode in which things outside the intellect exist. The acts or operations of the intellect...also have actual or formal being. Indeed, the only things that have objective being are...the res cogitata that exist in the mind (Chappell 187).

We are given to understand the ontological status of the idea in the objective sense: it is a repository of ideas. Which ideas? Such ideas as are the perceptions of consciousness. It is therefore not to be confused with the formal content of the idea whose articulation of the idea in the material sense indicates a true objectivity of thought. The

objective content of the intelligible element is devoid of all causality. It does not, indeed, it cannot be the source of knowledge of things for it entertains neither an efficient nor a formal causality of noesis. Its function is limited to that of a pure perception; familiarly, it is the billboard of the mind.

As we advance in the reading of the Cartesian text, we observe frequent indications of how the mind produces the ideas and how it separates them into substance and accident:

A savoir, si ces idées sont prises en tant seulement que ce sont de certaines façons de penser, je ne reconnais entre elles aucune différence ou inégalité, et toutes semblent procéder de moi d'une même sorte; mais les considérant comme des images, dont les unes représentent une chose, et les autres une autre, il est évident qu'elles sont fort différentes les unes des autres; car en effet celles qui me représentent des substances, / sont sans doute quelque chose de plus, et contiennent en soi (pour ainsi parler) plus de réalité objective, c'est-à-dire participent par représentation à plus de degrés d'être ou de perfection, que celles qui me représentent seulement des modes ou accidents;... (40).

Another 'truth' is forthwith impressed upon our understanding, the most important when we make the comparison between Descartes and Pascal; namely, that the idea is a product of understanding alone:

Car encore que cette cause-là ne transmette en mon idée aucune chose de sa réalité actuelle ou formelle, on ne doit pas pour cela s'imaginer que cette cause doive être moins réelle; mais on

doit savoir que toute idée étant un ouvrage de l'esprit, sa nature est telle qu'elle ne demande de soi aucune autre réalité formelle, que celle qu'elle reçoit et emprunte de la pensée, ou de l'esprit, dont elle est seulement un mode, c'est-à-dire une manière ou façon de penser. Or afin qu'une idée contienne une telle réalité objective plutôt / qu'une autre, elle doit sans doute avoir cela de quelque cause, dans laquelle il se rencontre pour le moins autant de réalité formelle, que cette idée contient de réalité objective... (Méditations 41-42).

Although Descartes mentions the term 'cause', it is clear that he is not referring to the causality of an extra-mental thing.

An opening is thus made possible for the Pascalian argument. The speculative principle inherent in the "material" manifestation of the intelligible element is the idea in the material sense, understood this time as an extra-mental causality. The material act of conception is "material" to the extent that it does indeed grasp the nature of things; that is to say, it conceives the essence. We argue the case that Pascal chooses to ignore the purely intra-mental actualization of thought -- the idea in the objective sense -- as principle of knowledge; instead, his theory of ideas exhibits a preference for the idea in the material sense with the ensuing formal content grasped as causal property.

In order to comprehend the importance of this counterproposal, let the reader pause and consider for several moments the final result of a choice of the idea in the objective sense as necessary ground of noesis. It has already been observed that Descartes elaborated the idea in the

objective sense firmly upon the actuality of the idea as it is contained in consciousness; that is to say, Descartes establishes the idea in the objective sense through reference to the innate ideas. He states:

...au contraire j'ai souvent remarqué en beaucoup d'exemples qu'il y avait une grande différence entre l'objet et son idée; Comme, par exemple, je trouve dans mon esprit deux idées du Soleil toutes diverses; l'une tire son origine des sens, et doit être placée dans le genre de celles qu'j'ai dit ci-dessus venir de dehors, par laquelle il me paraît extrêmement petit; l'autre est prise des raisons de l'Astronomie, c'est-à-dire de certaines notions nées avec moi [emphasis added], ou enfin est formée par moi-même de quelque sorte que ce puisse être, par laquelle il me paraît plusieurs fois plus grand que toute la terre; Certes ces deux idées que je conçois du Soleil ne peuvent pas être toutes deux semblables au même Soleil, et la raison me fait croire, que celle qui vient immédiatement de son apparence, est celle qui lui est le plus dissemblable (Méditations 39-40).

The significance of this famous example is unmistakable. Descartes posits a direct relation between the idea in the objective sense and the rational measure of the idea. This measure is located within the subject, certain ideas with which the subject is born. Grounded upon an entirely intra-mental measure -- the innate idea -- Descartes is enabled to construct the epistemological justification for the idea in the objective sense as principle of noesis: the criterion of certitude. He has not, however, transcended the question of certitudes to entertain questions of veracity -- a veracity which would render problematic the ability of the idea in the objective sense to appropriate the

intellectual substance of the thing. Thus although mention is made of the senses as source of the idea of the thing, Descartes grounds knowledge upon intra-mental reasons: the innate idea.

Nevertheless, Descartes does make an attempt to rehabilitate extra-mental causality. He continues:

Maintenant c'est une chose manifeste par la lumière naturelle qu'il doit y avoir pour le moins autant de réalité dans la cause efficient et totale que dans son effet: Car d'où est-ce que l'effet peut tirer sa réalité sinon de sa cause? et comment cette cause la lui pourrait-elle communiquer, si elle ne l'avait en elle-même?

Et de là suit, non seulement que le néant ne saurait produire aucune chose, mais aussi que ce qui est plus parfait, c'est-à-dire qui contient en soi en plus de réalité, ne peut être une suite et une dépendance du moins parfait: Et cette vérité n'est pas seulement claire et évidente dans les effets qui sont cette réalité que les Philosophes appellent actuelle ou formelle; mais aussi dans les idées où l'on considère seulement la réalité qu'ils nomment objective;... (Méditations 40-41).

Although Descartes would like to convince us that the ideas in the objective sense are not pure fabrications of the intellect, he does not depart from his essential position. Indeed he reaffirms the operation of innate ideas in the following text:

Et encore qu'il puisse arriver qu'une idée donne la naissance à une autre idée, cela ne peut pas toutefois être à l'infini, mais il faut à la fin parvenir à une première idée, dont la cause

soit comme un patron ou un original, dans lequel toute la réalité ou perfection, soit contenue formellement et en effet, qui se rencontre seulement objectivement ou par représentation dans ces idées (Méditations 42).

The Cartesian system of thought employs the idea in the objective sense as principle for the epistemological ascertainment of things insofar as the idea is susceptible of being perceived as an objective content of thought -- a surrogate thing. However, we have already observed that there exists no causality issuing from the idea in the objective sense. We therefore advance the opinion that the Cartesian analysis of ideas has confused the billboard -- the objective content of the idea -- with the message -- the formal content of the idea.

The finest example of the Cartesian election of the objective idea as principle for the epistemological ascertainment of things is the famous affirmation of the Cogito, where Descartes specifies:

...& lors j'ay dit que cette proposition: Je pense, Donc Je suis, est la première & la plus certaine, qui se présente à celui qui conduit ses pensées par ordre, je n'ay pas pour cela nié qu'il ne fallut sçavoir auparavant ce que c'est que pensée, certitude, existence, & que pour penser il faut estre, & autres choses semblables; mais, à cause que ce sont là des notions si simples que d'elles-mêmes elles ne nous font avoir la connaissance d'aucune chose qui existe, je n'ay pas jugé qu'elle deussent estre mise icy en compte (Principes I, 10).

Gilson observes, "Descartes sait fort bien que, sauf dans le cas unique de Dieu, notre notion d'une essence quelconque n'implique jamais son

existence, mais, pas plus pour lui que pour Suarez, il ne suit de là que l'existence soit réellement distincte de l'essence dans les êtres actuellement existants" (160). The present assertion of deemed existence is in truth the assertion of an immanent objectivity, the "...réalité représentative de l'idée...considérée...sous le point de vue objectif" (Méditations 7 note 1). The principle of experience (existence) must needs lie elsewhere.

To render actual the objective immanence of the intelligible element, Descartes has recourse to an equivocation between the material actuality of conception -- the idea in the material sense -- and the consequent objective materializations of such actuality to consciousness in the manner of perceptions -- the idea in the objective sense. In a word, there results a confusion between the intra-mental perception of a content of idea with the causal property of perception: the formal content of the idea articulated within the material act of conception. This argument is supported by the analysis of Allard: "Or l'acte de penser implique un lien nécessaire avec l'existence du sujet pensant" (105). The Cogito articulates the formal content of the idea within the act of conception ("...l'acte de penser..."); there forthwith ensues, however, a subsequent materialization of the concept in the manner of an objective representation ("...l'existence du sujet pensant...") -- a representation understood to disclose the contents of objective thought. The Cogito is the purest example of a noetic transaction whose object is always immanent.

A difficulty then arises as to how the subject may have knowledge of

things, for as yet this conclusion rests unproven. A theory of correspondance thereby ensues, this avenue rendered possible to the extent that the intellectual substance of the real thing may be reflected in the objectified representations of thought: the perceptions of consciousness. There results, however, a consequent difficulty, for the substitution of knowledge of the objective idea -- res cogitata -- in preference to knowledge of real things -- intentio rei -- entails the opposite of the intended effect; knowledge hereby attained does not concern the reality of things. Chappell agrees with this analysis of the Cartesian programme: "This does not show that no representatum can be identified with any external object. But it does prove that representata...are not in general identical with the thing that these ideas...are said to be of" (186). Lost to the discussion is the formal content of the idea whose reality necessarily derives from the being of things. As observed by Descartes himself, knowledge of things is to be had, not in accordance with

...l'ordre de la vérité de la chose (de laquelle je ne traitais pas alors), mais seulement selon l'ordre de ma pensée; si bien que mon sens était que je ne connaissais rien que je susse appartenir à mon essence sinon que j'étais une chose qui pense, ou une chose qui a en soi la faculté de penser. Or, je ferai voir ce-après comment, de ce que je ne connais rien autre chose qui appartienne à mon esprit, il s'ensuit qu'il n'y a aussi rien autre chose qui, en effect, lui appartienne (Méditations 7).

Hence, the Cogito effectively precludes the affirmation of an existence as extra-mental. Indeed it is uniquely an affirmation, as Gilson has agreed with respect to Descartes and Suarez, of the determination of an

essence as existent: "Tout se passe dans cette doctrine comme si, l'existence se confondant avec la pleine actualisation de l'essence comme telle, elle épuisait en cela même toute son efficace causale et sa vertu explicative" (153). The idea of the Cogito -- the intended object of rational activity -- is in truth an actualised essence; that is to say, an immanent objectivity. In the present attempt at knowledge of the extra-mental reality Descartes carefully avoids discussion of the intentio rei, that heterogeneous aspect of knowledge, the being of which pure reason alone is incapable of furnishing.

Conversely, Pascal offers an analysis of knowledge and human understanding based on principles of extra-mental causality. Knowledge cannot be the result of a unique determination of the innate ideas but must follow from the operations of understanding which receive the intentions of things. It is knowledge as physis of ideas. And we ground this thesis upon the idea in the material sense, for it is through the material act of conception that the subject may articulate the formal contents of the idea which are elicited from the real thing. This is how we arrive at the notion of a physics of cognitive science. It is the material act of conception which actualizes the formal content of intellection in the manner of le concept formel (Gilson 145-46); the formal content of the idea thereby serves to evidence the intellectual substance of the thing (Chappell 190). It is therefore the material act of conception which is the principle of knowledge within a rational physiognomy.

This avenue eliminates the Cartesian opposition between ideas in the

objective sense and ideas in the material sense. The idea in the objective sense is in opposition neither to the idea in the material sense nor to the intellectual substance of the thing: it is merely the billboard of the mind. A consequence of our thesis is that the Pascalian system of thought ignores the traditional questions of representation and adequation; rather it is an attempt to study the physical and nomological principles which clarify the underlying "material" ground of knowledge. The actualization of these principles occurs at the level of the material act of conception and the formal content of the idea. This procedure eliminates the need to rely upon psychological categories for the ascertainment of the truth value of ideas. In a study entitled 'Valeur, critique et euristique de l'idée de la nature chez Pascal', Magnard questions the feasibility of the Pascalian project and notes ("...l'impossibilité de conjuguer le rationnel et le réel" (65). We argue that the rational reality to which Magnard refers is the idea in the objective sense -- the Cartesian election of immanent objectivity -- and not the idea in the material sense.

The Pascalian system of thought discloses many forms of intellection: these forms pertain to the actuality of thought itself in physical and nomological categories. And the forms which constitute the categories of understanding take shape within the very act of conception itself. We shall presently put forth the argument that the five pathways to knowledge are themselves subsistent within the act of conception as categorial forms of intelligibility for the reception of the intentions of things. This position is echoed in the analysis of Chappell who deems the material act of conception "...more properly instruments or vessels.

than agents" (191-2). The material act of conception articulates the formal contents of the idea for the edification of the five pathways of understanding. Within the act of conception, Pascal discovers not one but five modes of intellection thereby offering to the object a multiplicity of pathways of being known and present to the subject. We are henceforth witness to five material qua operational modes of noesis: modes of heart, intellect, reason, custom, and instinct. This effect will be described in the succeeding chapter.

These are the principles which guide the elucidation of the rational physiognomy of the Pensées. Rather than the principles of consciousness, Pascal elects to ground knowledge of the thing upon principles of actuality of conception and the consequent articulation of the formal content of the idea. There is henceforth indicated an alternate set of agencies occurrent within the material operations of understanding itself, operations of a purely formal nature. For this formula to be successful one thing must be certain: the subject of its own accord, within its nature as material operations of understanding cannot produce an object of knowledge -- cannot have knowledge of things as such things are in themselves -- uniquely within its own power. The ascertainment of the correct judgement of things requires that the subject receive the intellectual substance of the thing, and this is possible only to the extent that there are principles and a medium capable of the transmission of such natures. The principles are physical and nomological, the medium is the body. As such, the endeavour of Pascal aims not at certitude but at wisdom. In the third chapter, the noetic function of the body will be introduced insofar as it enables the elucidation of the five modes of

intellection.

We may therefore envision the conceptual difference between Pascal and Descartes in the following manner:

Idea = Form

Pascal	Descartes
Material sense (formal content)	Objective sense (objective content)
<u>modes</u>	<u>modes</u>
heart	reason
intellect	
reason	
custom	
instinct	

This restatement of the problematic of intentional relations between subject and object specifies the rational act of understanding as necessary ground of all intentional relations. The notion of understanding as employments or powers has previously been postulated in the introduction as fundamental to the elucidation of the thought of Pascal. We therefore observe that the response of Pascal to the problem of knowledge of the extra-mental proceeds in a unique manner, through the functionality of the material act of conception understood in an extra-mental acceptance -- such operations as forthwith serve to organise, receive, categorise, and comprehend the intentio rei.

Our thesis finds its confirmation in the observations of Magnard:

Force nous est en conséquence de soumettre toute définition et tout discours à l'épreuve de l'expérience: telle sera la règle première de Pascal.... Dès lors, la définition perd chez lui toute valeur notionnelle; tout juste peut-elle avoir un rôle explicatif dans l'analyse des réalités composées, mais elle ne saurait rendre compte de la nature du simple; l'artifice de la généralisation n'autorise que la dénomination classificatoire, il ne saurait prétendre mettre en évidence une réalité générique; de raisons séminales ou principes, il n'est que ceux que viennent de l'expérience (63).

This is the Pascalian response to Descartes' system of thought: It is the election of a "material" principle capable of grasping the intellectual substance of a thing. And this is achieved insofar as the material act of conception is at once both the process of consciousness (materialiter) and the receptor of the intentions of things. It must therefore be evident that all attempts to view Pascal as a disciple of Descartes are severely misinformed. When it is argued that "Le cartésianisme lui fournit un outil propre à augmenter son empire sur tout ce qui est abstrait, et par conséquent à compléter une formation essentiellement concrète" (LeGuern 125-26), the critic of Pascal seems to have disregarded the very words of Pascal on the nullity of the Cartesian philosophic endeavour (79). Instead, we have interpreted the Pascalian texts in an alternate fashion; namely, the system of a rational physiognomy. This interpretation is authorized by the Pensées (684).

In this first chapter, we have established the Cartesian system of

thought as a reference point from which to perform an analysis of the philosophy of Pascal. We have situated Pascal with respect to the dominant contemporary figure of his time and shown that the choice of immanent objectivity is an avenue closed to Pascal. Indeed Pascal travels in a direction opposite to that of Descartes, even though an analysis of his thought may be undertaken employing many of the same tools as provided by Descartes. Rather than a metaphysician of knowledge and of the world in the manner of a Descartes, Pascal is revealed to be a physicist of the soul and the soul's relations with the extra-mental world by virtue of his seeking to elaborate a response of the thinking subject to the reality of things based on principles of actuality. The approach of Pascal is physical and not metaphysical; in preference to the Cartesian attempt to conceive the world along purely subjective exigencies, Pascal offers to listen to the world through the requisites of the world's structuration, a structuration which he discovered parallels the rational physiognomy of the soul. It is out of such a perspective that we now turn to the second chapter, a chapter in which we detail the rational nature of the five modes of intellection.

Chapter 2

"Le pyrrhonisme est le vrai"

In the preceding remarks we have examined the formal and ontological nature of the Pascalian theory of ideas. The present chapter will seek to advance the discussion in terms of a specification of the material act of conception and the five modes of intellection. This effect may be achieved through the concept of disposition. Pascal states:

Qu'est-ce que nos principes naturels, sinon nos principes accoutumés? Et dans les enfants, ceux qu'ils ont reçus de la coutume de leurs pères, comme la chasse dans les animaux?

Une différente coutume nous donnera d'autres principes naturels, cela se voit par expérience; et s'il y en a d'ineffaçables à la coutume, il y en a aussi de la coutume contre la nature, ineffaçables à la nature, et à une seconde coutume. Cela dépend de la disposition (92).

The term 'disposition' is fundamental to the present specification of the formal content of the idea. It permits the specification of the content of the idea through a directedness of the material act of conception toward things of the extra-mental world. This directedness is located within the fivefold pathways of knowledge within the subject. Hence, the question to be answered is the following: in what manner do the five pathways of understanding, the modes of intellection, achieve directedness on the part of the material act of conception? The answer is clear. It is a matter of disposition. The following text serves to explain:

We can all agree that thinking is rightly described as

conceptual cognition. To use a studiously vague phrase, we can all agree that concepts somehow 'enter into' it. The question is, how or in what guise they enter into it. Do they enter into it as objects of intellectual inspection, as the Classical theory of thinking maintains? Are they 'before the mind' when we think, 'presented to it'? Or would it be better to say that they are at work in it, had in mind rather than presented to it?

(Price 313)

We may henceforth grasp the categorical directedness of a concept pursuant to the insight of Pascal on the nature of custom. The nomological insight is the insight of dispositionality as fundamental to the operations of the human understanding.

Further support for this reading of disposition as determinant of the functional quality of ideas may be obtained from the following passage, in which is clearly stated the consonance of custom and concept: "La coutume est notre nature. Qui s'accoutume à la foi, la croit, et ne peut plus ne pas craindre l'enfer, et ne croit autre chose. Qui s'accoutume à croire que le roi est terrible..., etc. Qui doute donc que, notre âme étant accoutumée à voir nombre, espace, mouvement, croie cela et rien que cela?" (89). The nomologically grounded principle of disposition may therefore be understood as the particularizing element of noesis. We can call it a specification of the idea. This dispositionality of the concept is as true of the mathematical notions of space, time, and number as it is of non-mathematical notions of religious faith. It is therefore ideally suited to serve as ground for the conceptual appropriation of things. There are five modes of intellection which operate

dispositionally toward the reception of the intentions of things: the heart, intellect, reason, custom and instinct.

In a work entitled Vérité et méthode dans les 'Pensées' de Pascal, Harrington confirms this assertion, more especially in reference to instinct:

L'instinct nous apporte certaines connaissances, mais il semble que, pour Pascal, ces connaissances de l'instinct soient des tendances ou des réflexes saines et utiles plutôt que les principes innés opérant au niveau de la conscience et servant de point de départ à la raison. Par contre, le cœur et l'instinct ont ceci de commun qu'ils portent leurs vérités à notre connaissance par voie du sentiment (87).

It is to this notion of tendances that reference is made in the dispositional appropriation of the object by the subject; upon this basis may be elucidated the particular articulations of a rational physiognomy, a physiognomy which takes the form of operational categories of understanding. The possibility of conceiving the concept in terms of dispositional categories is supported by the following article:

..concepts are essentially habits or capacities for the right use of words, or for the production of suitable conditioned responses, or for recognition, or for image formation, or again for a discursive acquaintance with distributed universalia in rebus on the Aristotelian model. In all these cases the habit or propensity is generally thought of as acquired -- at least as regards the more elementary empirical concepts -- by some process of comparison, selection and abstraction. Recurrent

elements in experience are taken to engender, modify, and reinforce the disposition, which then operates in its turn as a principle for the ordering of subsequent experience, the guidance of action, or the control of thought and talk.

Concepts, in this dispositional sense, are still subjective and peculiar to the individual. It is assumed, however, that exposure to a common environment, plus the customary processes of education and social attrition, will normally lead to a sharing of concepts and to the eventual acquisition of a standard repertory of concepts held in common by virtually all members of a given cultural or linguistic group (Heath 2: 179).

In the following paragraphs, detailed references will allow for the verification of the material act of conception as a specific dispositional articulation of the general categories of understanding.

Price restates the problematic of ideas: "What exactly is the issue we have to discuss? Some people would put it thus: are concepts entities or are they dispositions?" (320) Then he explains:

For the term 'concept', or 'abstract idea', may have a dispositional as well as an occurrent interpretation. What the Imagist objects to is occurrent abstract ideas. He objects to them on the very cogent ground that they are not actually found to occur. The concepts he wishes to abolish are concepts which are alleged to be objects of inspection, inspectable or introspectible bits of intra-mental furniture. But if the term 'concept' be interpreted in a dispositional way, as it has been in this book, the Imagist philosophers do not abolish concepts

at all, but offer an analysis of what a concept is, or of what it is to possess one. A man who possesses the concept Dog ('knows what a dog is like' is the ordinary phrase) has the capacity for doing two things which a man who lacks it cannot do. When he is actually perceiving a dog he can recognize that it is one, and he can think about dogs when he is not perceiving any dog (276-77).

Quite apart from the dispute between Imagists and Abstractionists, the importance of this observation lies in the clear alternative of a dispositional grasp of the concept as act. This effect is further clarified in the definition of concept itself: the concept is understood "...to mean a certain sort of mental disposition in ourselves" (60). Price has deemed this mental disposition an activation of thought. "Moreover, as we have seen, the 'activating' of any mental disposition is a matter of degree. Between the two extremes -- complete latency and complete actualization -- there are many intermediate degrees of sub-activation" (317). We have elected to describe such an activation of thought as the material act of conception. Is this not precisely the notion of a material act of conception? The modes of intellection are specified through their respective dispositional quality into a specific act of conception. And it is the mode of intellection that is dispositional in nature. It is the dispositionality of the mode as form of thought which directs the concept.

A short work by Geach supports this dispositional analysis of ideas in the thought of Pascal. "Concepts", he observes, "are capacities exercised in acts of judgment..." (7). In the present thesis, these acts

of judgement are deemed synonymous with the material act of conception. They are distinct from dispositions per se. Indeed it is Geach who argues the difference between disposition and concept, much to the advantage of the present reading of Pascal. "However difficult the logic of dispositional words may be, it is surely clear both that 'believe' is such a word, and that the acts which make it true to say that So-and-so believes such-and-such are not only, perhaps not at all, acts of judgment" (8). There are dispositions to know; these are the modes of intellection enumerated in the introduction. The categorial structure of the modes are not merely forms of belief; they are forms of conception. An individual act of conception tailors the disposition to the experience of an extra-mental reality; in a word, the mind makes concepts, the material act of conception, upon the basis of the categorial structures of directedness -- such structures as are themselves qualified as dispositional in nature. It is this choice of dispositionality that we assert as true in the thought of Pascal. In the third chapter, it will be argued that the employment of dispositional categories of thought -- the modes of intellection -- permit the actualization of avenues of conceptual condition which are true of the extra-mental thing. In the fourth chapter, the guarantee of this truth will be specified: the notion of the body.

This latter guarantee is absent in the Cartesian system and will be introduced by Pascal in the form of disposition. His way of knowing differs from the Cartesian approach and the Classical theory of knowledge;

...according to the Classical theory, all these ways in which one's possession of the Concept Dog are actualized are

derivative. The fundamental actualization of it, on which all the others depend, is a unique sort of cognitive act, an act of inspection or intuitive apprehension, which may be called conceiving. And this act has an object. Its object, in the present example, is Doghood (Price 320-21).

Pascal, on the other hand, may be understood in terms of the notion of disposition, for dispositional concepts of things depend "...upon the actual structure of their minute constituents" (Price 321); that is to say, upon the empirical reality of the thing. This dispositional character ascribed to the modes of intellection is "empirical" (Price 317) to the extent that it is a theory which aims to actualize the categorial structures of knowledge based on the categorial structure of things in the world.

Price continues:

Of course, if the terms 'concept' or 'abstract idea are understood in their dispositional sense, then certainly my concept or abstract idea of Wolf was sub-activated by my hearing of what my companion said. It manifested itself occurrently by means of sub-vocal words, by the production of a wolf-like image, whether a generic image or not, and by putting me into a state of readiness for the presence of the actual wolf. This readiness, we may notice, was not merely psychical but also psycho-physical, as the accompanying organic sensations showed (332).

Is this not a restatement in epistemic terms of the notion of a rational physiognomy, the operative categories of the modes of intellection -- the

dispositions of the subject -- to receive intentions from the world? And these intentions, are they not actualized within the being of the intelligible element, in the material act of conception as powers or capacities of knowledge? And do not the "psycho-physical" reactions of the "organic sensations" demonstrate the influence of the body in the rational physiognomy, an influence which guarantees the intentional veracity of statements about the world? Such does indeed seem to be the case.

Here, then, is the empirical implication of the subject in the world at the level of a rational physics: the materiality of the act of conception receives direction from the dispositions within the subject to obtain knowledge of the extra-mental world. It is thus that the modes of intellection ground the intelligence of the material acts of conception; that is, the concepts. And this conclusion obtains to the extent that such modes are dispositional structures within the subject itself -- categories of understanding which permit to a greater or lesser degree the perception and conceptual ascertainment of the formal content of the idea. Likewise, we are enabled the comprehension of the thing through the material act of conception itself -- for therein lies the articulation of the formal content of the idea. In the fourth chapter, this explication will be made more explicit in terms of the rational physiognomy. For the moment we shall content ourselves with the following observation: the elucidation of the material act of conception may be undertaken in terms of the notion of concepts; such concepts as are deemed capacities to know the world through the directedness of dispositions within the subject.

Price likewise defines a concept in the following manner: "A concept, let us say, is more like a force than an entity" (336). "It is as if a concept were striving, so to speak, for material embodiment, and progressed towards this end in a series of states (341). This "material embodiment" is synonymous with the notion of the material act of conception within the rational physiognomy of Pascal. The subject may have true knowledge of things pursuant to the "material embodiment" of the concept -- the veritable material act of conception. Is this not the epistemic foundation for a rational physiognomy? The material act of conception is but the specific actuality or active element of a rational physics which is necessary to the understanding of the world.

By way of explanation, Price offers an analogy: "The concept in the mind of the craftsman or other practical expert manifests itself in what he does, without being present to his mind as an object of inspection" (345). That is to say, the formal content of the idea is particularized through the material act of conception, such conception known concretely to the subject insofar as the concept instances the modes of intellection. Price continues:

Let us be content to say that in verbal thinking our concepts manifest themselves as guiding forces, directing the flow of words both public and private; as in image thinking they manifest themselves by directing the flow of images, and in intelligent action, by directing the flow of muscular movements which are the successive states of execution (350).

This is the rational physiognomy in the view of an epistemologist. It is the understanding one elicits of the world through the employment of

dispositional categories of thought: the modes of intellection which are particularized and actualized in the material act of conception -- in the specific capacity of thought named 'concept'. The notion of a concept as material act of conception, as act or actuality, as force or capacity, is precisely the means by which Pascal, as physicist of the soul, elaborates the attempt to make sense of the world.

The following passage allows access to this line of thinking in the Pensées:

Les pères craignent que l'amour naturel des enfants ne s'efface. Quelle est donc cette nature, sujette à être effacée? La coutume est une seconde nature, qui détruit la première. Mais qu'est-ce que nature? Pourquoi la coutume n'est-elle pas naturelle? J'ai grand peur que cette nature ne soit elle-même qu'une première coutume, comme la coutume est une seconde nature (93).

This text of Pascal lends credence to the view presently offered concerning the nature of the categorial structure of concepts; they are categories which appear natural to man. And a "physical" approach to the nature of concepts would be entirely appropriate to their dispositional employment, for the physicist merely reasons on things as such things are presented through the intentio rei, through the intellectual nature of things.

It may be argued that Descartes also, entertained the notion of disposition as fundamental to the operations of understanding. Indeed Bréhier admits:

Descartes' innatism is merely the formulation of this separation. Innatism means that there are ideas which the intellect draws from its own resources and uses to initiate thought; it asserts the independence and the interiority of the succession of methodically connected thoughts in contrast to the arbitrary succession of the impressions of the senses and the imagination....The innatism of ideas consists in the disposition and, so to speak, the vocation of the understanding for conceiving them; they are innate in us just as gout and gravel are hereditary in certain families (73).

But there remains the following very important difference between the concept of disposition in the thought of Pascal and the concept of disposition in the Cartesian system of thought. For Descartes, disposition relates uniquely to the innate ideas; it is a purely intra-mental qualification of the idea. Pascal, on the other hand, undertakes a dispositional approach to knowledge on the basis of such dispositions necessarily relating to the extra-mental reality of a thing. That which Descartes denies to the "transitory natures" of extra-mental reality (Bréhier 72), Pascal identifies as necessary for the comprehension of things. Hence the term 'disposition', while of like appearance in the two philosophies remains separate with respect to their acceptance of the term.

To summarize, we observe in the thought of Pascal reference to a dispositional approach to knowledge. We have likewise stated that the material act of conception is not in itself a disposition but rather the agent of a disposition to know things of the world. Dispositions are

forms of unity or directedness which aim the particular material act of conception toward an object. It is therefore the modes of intellection which perform the function of dispositional categories of understanding. Meanwhile, it is the role of the material act of conception to specify the directedness of the subject to a particular formal content of idea. Hence we arrive at the conclusion that the material act of conception is the aspect of a rational physiognomy which most resembles the 'physical principle' of the soul. As Price has argued, it is the "material embodiment" of the subject's search for true knowledge of things. The nomological aspect of the rational physiognomy enlightens the reader of Pascal to the dispositional nature of intelligence. Herein lies the twin directives of physis and nomos as they appear in the thought of Pascal.

The title of the present chapter may appear somewhat extraaneous to the question of dispositional thought. However upon closer examination of the texts we are able to discern a certain identity of purpose. It is Pascal himself who observes:

Pyrrhonisme. -- J'écrirai ici mes pensées sans ordre, et non pas peut-être dans une confusion sans dessein: c'est le véritable ordre, et qui marquera toujours mon objet par le désordre même. Je ferais trop d'honneur à mon sujet, si je le traitais avec ordre, puisque je veux montrer qu'il en est incapable (373).

We interpret this reference to Pyrrhonism as the denial of an order of occurrent abstract ideas -- of an immanent objectivity -- in preference to dispositional categories of understanding specified in the material act of conception. We may likewise make reference to the Pyrrhonians themselves through the intermediary of the text of Diogenes Laertius.

Diogenes Laertius attributes to Pyrrhus the doctrine of Scepticism:

Pyrrhon...introduisait l'idée qu'on ne peut connaître aucune vérité, et qu'il faut suspendre son jugement, comme nous l'apprend Asconias d'Abdère. Il soutenait qu'il n'y avait ni beau, ni laid, ni juste, ni injuste, que rien n'existe réellement et d'une façon vraie, mais qu'en toutes choses les hommes se gouvernent selon la coutume et la loi. Car une chose n'est pas plutôt ceci que cela (191).

The furtherance of knowledge and understanding of the extra-mental reality occurs within the context of custom and law. Pascal's reference to Pyrrhonism may therefore be grasped as an indirect reference to the extra-mental and especially "physical" approach to noesis outlined in the previous chapter: it is the elucidation of categories of understanding through means other than the content of the idea in the objective sense. Such an approach authorizes the determination of the idea in the material sense, a determination which effects dispositional meanings upon the formal content of the idea.

This emphasis in the thought of Pascal on the experimental and dispositional at the expense of the definitional and abstract is supported by Le Roy:

C'est dire que Pascal n'a pas de système: il n'a pas de méthode codifiée d'avance, qu'il suffise ensuite d'appliquer à toute question nouvelle; il n'a pas, non plus, de doctrine arrêtée, où se trouve a priori une solution pour tous les problèmes. Sa pensée n'est qu'une quête incessante: toujours prête à s'ouvrir devant la vérité, d'où qu'elle vienne, elle cherche à se modeler

sur le réel, à en épouser sans parti pris les sinuosités et les accidents, à reconnaître l'unique et l'irréductible partout où il s'observe, à décrire en somme les choses en leur diversité;... (92).

The Pascalian affirmation of Pyrrhonism is grounded upon the insight that the modes of intellection -- the most striking of which is the mode of custom -- are dispositional and not definitional in nature. It is the recognition of an alternate philosophy: modes of a material condition, modes which are situated within the context of the veritable act of conception as capacities of thought -- acts which in the present case elicit the fundamental directedness of the subject toward the object through dispositional categories of thought.

Pursuant to the examination of the "physical" principle of noesis, we observed the dissolution of the traditional epistemic relation between the idea in the objective sense and the formal reality of the thing. We have argued the case that Pascal responds with a "materiality" of rational process, a formal causality of noetic relations which assumes the condition of the idea in the material sense -- the veritable act of understanding with its formal content of idea. Presently, in the hands of Pascal, the doctrine of Pyrrhonism reiterates the ontological neutrality of knowledge in terms of dispositionally specific categories of understanding; it is an endeavour which attempts the understanding of things strictly in terms of the rational act or materialiter of noesis.

Thus we discover in the ancient doctrine of Pyrrhonism a supplementary confirmation of the dispositional structure of thought in

Pascal. This occurs due to the prior refusal of a theory of adequation between the idea in the objective sense and the real thing, the rational and the real (Magnard 65). There ensues a necessary return toward the thing, this effect accomplished through material acts of conception and dispositional categories of thought. The five modes of intellection constitute five possibilities for the eventual actualisation of understanding with respect to things of the world -- more especially, five dispositional natures which serve to orient the receptivity of the subject toward the noetic reality of the object.

Chapter 3

"Coeur, instinct, principes"

Of the five modes of intellection previously introduced, those of heart and instinct, le coeur and l'instinct, would appear to represent acts of conception of a totally opposite nature. The above mentioned fragment (281) supports their interpretation as principles of a contrasting kind. The present chapter is an elucidation of each category; their respective modes of operation. The most efficient manner of proceeding will be first to state the nature of each mode of intellection and then to proceed to their individual amplification. Having stated in the first chapter the principle of causality necessary to the understanding of the five modes of intellection -- that their nature is one of act which assumes the particular property of ideas in the material sense -- and enunciated in the second chapter the nomological aspect of the modes of intellection -- the categorial dispositions within which to situate the acts of conception, it is now necessary to explain the modes in the particularity of their operation; as they individually relate to things of the world.

We have asserted on a number of occasions that Pascal locates the source of knowledge and understanding in the extra-mental world. Le Roy concurs with our view:

Il faut consentir, au contraire, dès le début de toute enquête, à se jeter in medias res; il faut se tenir pratiquement aux affirmations qui s'avèrent suffisamment solides, dès qu'on les énonce, et s'engager ensuite, à partir de là, en des

explorations patientes, au cours desquelles les idées se taillent progressivement à la mesure même du réel. De fait, en ces explorations, la pensée progresse toujours par sauts brusques: elle constate, sur un premier plan, qu'un problème se pose, et qu'elle ne peut en découvrir, sur ce plan, une solution adéquate; par une décision hardie, la pensée doit donc s'élever plus haut ou se laisser emporter; sur le plan supérieur où elle parvient alors, elle découvre le principe d'une solution et voit aussitôt se résoudre les difficultés du début (67-8).

This judgment is likewise rendered by the analysis of Chevalier:

Il y a, chez Pascal, une méthode de connaître: on chercherait vainement chez lui un système, voire même une doctrine de la connaissance. Et, dans ce manque, qui pendant longtemps a été regardé, et de nos jours encore n'a pas cessé d'être regardé par beaucoup, comme un défaut grave, je serais tenté de voir, non seulement le caractère propre et distinctif de la philosophie de Pascal, non seulement la raison de sa supériorité sur la plupart des philosophes, mais encore le principe d'une révolution qui, à l'inverse de la révolution kantienne, rendrait la pensée humaine à sa véritable destination en la ramenant au réel (181).

And how is this receptivity of the intellectual substance of the thing to be accomplished in the thought processes of the subject? Magnard offers the following explanation: "La structure ainsi définie donnera lieu à découvrir des analogies entre des totalités aperçues en des plans différents; plus précisément, à partir de la structure propre à la totalité que constitue l'homme, on cherchera à découvrir des totalités qui aient avec elle 'de la consonance'" (67-68) / This consonance is

indicative of the rational physiognomy of Pascal: the material act of conception is susceptible of the intellectual substance of things through the categories of disposition.

The text of Pascal entertains this interpretation:

M. De Roannez disait: 'Les raisons me viennent après, mais d'abord la chose m'agrée ou me choque sans en savoir la raison, et cependant cela me choque par cette raison que je ne découvre qu'ensuite'. Mais je crois, non pas que cela choquait par ces raisons qu'on trouve après, mais qu'on ne trouve ces raisons que parce que cela choque (276).

The subject accedes to the correct judgement of things in consequence of the effect of the thing upon the understanding. Forthwith engaged are the five modes of intellection as categorial dispositions of understanding. This reading is quite different from the view which states that empiricism entails "...une attitude passive en face de la réalité" (Le Roy 92). Rather than a passive attitude toward the world, Pascal favours the ability of the subject to receive intentio rei and to do so through acts of dispositional receptivity. They are dispositions which represent the activity of the subject with regard to the thing; however, they are acts of reception, of disposition, of categorization, and of clarification which render intelligible the thing to the subject.

In a work entitled Pascal et Leibniz, Guitton confirms this hypothesis of a rational physiognomy:

"Disons en résumé que pour Pascal l'union des contraires s'opère dans une structure hiérarchique, non par juxtaposition et

opposition, non par confusion ou absorption, non par continuité et conciliation. C'est que les contraires doivent être considérés comme dans un espace: ils ne sont pas sur le même plan, ils n'ont donc même pas la même valeur, ni la même fonction" (54).

This aspect of a rational physiognomy Guitton reasserts with respect to the notion of order:

Les échappées de Pascal sur la différence des ordres mettent en lumière un procédé de la nature et de l'esprit. Elles anticipent sur les découvertes des sciences en suggérant que ni la matière, ni la vie, ni l'infini mathématique lui-même ne sont homogènes, mais que l'infini comporte des degrés différents d'infini, et ce que nous appelons une structure (54).

The noetic reality of order in the nature of things is consonant with the nature of thought itself. This is especially true in respect of the five modes of intellection. With regard to the analysis of numbers Guitton observes:

Pascal n'aurait sans doute jamais accepté de voir dans ce calcul une fiction utile, une propriété imaginaire. C'est que, chez Pascal, le mathématicien et le métaphysicien empruntent au physicien l'esprit de sa méthode, qui est de reconnaître ce qui se trouve donné, d'y proportionner son hypothèse, et dans le cas où les données sont contradictoires de les respecter sans les éliminer mais en cherchant la structure de leur composition (39).

That which applies to the material nature of things -- the discernment of a structure of reality inherent in the extra-mental order -- likewise occurs within the material operations of understanding itself. The

structure of thought is the composition of a multiplicity of pathways necessary to an understanding of things. As such, the modes of intellection are to be recognized and comprehended in their separateness as well as their conjunction. Guitton pursues:

Quoi qu'il en soit, Pascal résout ces apories par sa notion de la différence des ordres. Les quantités inférieures ne sont jamais annulées; elles ne sont jamais tenues pour des néants. Elles existent. Mais, existantes du point de vue où nous les considérons désormais, dès lors que nous accédons à un ordre infiniment supérieur, elles sont de valeur nulle, nullius in valoris. Cette distinction entre le point de vue ontologique et le point de vue axiologique permet de résoudre l'antinomie (39).

Hence the notion of structure is a necessary consideration for the comprehension of a rational physiognomy. Each mode of intellection is unique and yet coexists with other forms of thought to achieve the clarification of an object of knowledge. They are forms of thought which "...progresses toujours par sauts brusques" (Le Roy 68). But the underlying value of each form or mode of intellection is never annulled -- it is merely subsumed within the intelligibility of a higher unity of understanding. Harrington confirms this conclusion in his work on Pascal: "La méthode pascalienne comporte aussi une autre sorte de mouvement, celui qui va, non pas d'une proposition à une autre, mais d'une structure à une autre qui lui ressemble" (84).

Let us begin therefore with the notion of heart, the first of epistemic realities. This is the most problematical and delicate of the five modes and will thus require the most detailed analysis and

explanation. Much of the difficulty stems from the language of Pascal; his usage of terms such as 'sentiment' and 'passion' to describe the efficacy of the heart as a function of understanding. To begin, we affirm that the heart is the category of intellection which houses the first principles of understanding. Pascal states: "Nous connaissons la vérité, non seulement par la raison, mais encore par le coeur: c'est de cette dernière sorte que nous connaissons les premiers principes, et c'est en vain que le raisonnement qui n'y a point de part, essaye de les combattre" (282). Pascal further asserts:

Tout l'abuse; ces deux principes de vérités, la raison et les sens, outre qu'ils manquent chacun de sincérité, s'abusent réciproquement l'un et l'autre. Les sens abusent la raison par de fausses apparences; et cette même piperie qu'ils apportent à la raison, ils la reçoivent d'elle à son tour: elle s'en revanche. Les passions de l'âme troublent les sens, et leur font des impressions fausses. Ils mentent et se trompent à l'envi.

Mais outre ces erreurs qui viennent par accident et par le manque d'intelligence, entre ces facultés hétérogènes... (83).

These two passages of the Pensées hold the key to an understanding of the present function, for contained therein are references to the heart as both unity of first principles and passions of the soul. In a short work entitled "Discours sur les passions de l'amour"¹ Pascal explains this conjunction of principles and passions of the heart. He begins:

L'homme est né pour penser; aussi n'est-il pas un moment sans

¹ References to short works of Pascal are cited by name and pagination.

le faire; mais les pensées pures, qui le rendraient heureux s'il pouvait toujours les soutenir, le fatiguent et l'abattent.

C'est une vie unie à laquelle il ne peut s'accommoder; il lui faut du remuement et de l'action, c'est-à-dire qu'il est nécessaire qu'il soit quelquefois agité des passions, dont il sent dans son coeur des sources si vives et si profondes (123).

As Brunschvicg has carefully observed, "La pensée est entendue ici au sens cartésien, c'est-à-dire qu'elle s'étend à tout ce qui se passe dans l'âme, image, idée, sentiment ou désir" (Discours note 1). He likewise affirms: "Les pensées pures, c'est-à-dire celles qui viennent de notre fonds, sans aucune influence extérieure, sans aucun mélange de corporel" (Discours note 2). Between pensée and pensées pures there is a difference.

The distinction between pensées and pensées pures is of primary interest for the purposes of the present study, for this subtle difference entails the incorporation of passions and sentiments into the material operations of heart, without thereby denying the epistemic nature of the function. Indeed, we argue the case that it is upon the evidence of passions and sentiments as qualities of the idea in the material sense that the body is discovered to be significant to the intellectual agency of the heart. This consequence ensues because the passions and sentiments of the heart constitute the immediate, inchoate contents of the intelligible element; those intentions which are directly intuited from the extra-mental world.

The pensées pures of Pascal are those ideas which belong to the heart.

as self-evident intuitions. To the extent that their ontological status is that of a formal content of idea purely intuited, they contain "...aucun mélange de corporel". It is the heart which intuits immediately these pensées pures. These are the innate ideas of Pascal. Pensées, on the other hand, refer to the extra-mental reality of the thing. Our interpretation of the Pascalian terminology finds support in a work by Morot-Sir entitled 'La Métaphysique de Pascal'. In his analysis, the epistemic reality of the heart is identified with "...le chaos de l'immédiat' (106). The intellectual agency of the heart constitutes the first principles of understanding ("Pensées". 282). But this experience of first intentions is necessarily related to the reality of things, "l'immédiat". It is for this reason that Pascal asserts the "shock quality" of things upon the perceiving subject (276).

But the term 'chaos' need not imply irrationality or inconceivability. The idea (pensée) need only convey the substantial truth of things: their totality, their immediacy and their originality. This reading of the category of heart is well illustrated in the analysis of Gilson: "Le problème est en effet de savoir, si la raison posera au coeur du réel le seul élément qui puisse lui permettre de comprendre ensuite le réel total, c'est-à-dire le réel pris dans la totalité des éléments qui le constituent" (323). To this question, the answer of Pascal is a distinct no. Gilson himself furnishes the beginnings of a response: "Il s'agit en effet de savoir si la connaissance rationnelle peut accueillir du non conceptualisable et de l'incomplètement objectivable sans renoncer pour autant à l'idéal de parfaite intelligibilité dont elle s'inspire"(323). This "...incomplètement

objectivable..." is precisely the ground of heart and the extra-mental reality of ideas (pensées) in terms of the intentions of things (sentiment). Hence we grasp the epistemic reality of the heart in an extra-mental acceptance: it is the conjunction of the ability to conceive the first principles of understanding together with the ability to experience the immediacy of things as rational nature.

How then do the qualities of passion and sentiment elucidate the character of an idea as pensée? First, the term 'sentiment' refers to the immediate perception of the formal contents of an idea by the subject. It is thereby analogous to sensations at the level of bodily perceptions. Each experience is sensed, but whereas the "sentiment" of thought employs the analogous "physical" principle of material acts of conception, the sentiment of bodily perception employs the truly physical principles of material functions of the body. We deem such acts of perception 'sentiments' because they evoke the immediacy of the object to the subject in noesis.

To support this position, the following text of Pascal may be recalled: "La mémoire, la joie, sont des sentiments; et même les propositions géométriques deviennent sentiments, car la raison rend les sentiments naturels et les sentiments naturels s'effacent par la raison" (95). Sentiment is the experience of the intellectual substance of the thing in respect of the immediacy of perception. Familiarly, it is the "excitement" of the soul as the soul experiences the object of intellection. Brunšchvicg notes:

Cette proposition ne s'entend que si l'on se souvient du sens

très spécial que Pascal donnait aux expressions qu'il emploie ici. La raison, c'est la culture de l'intelligence, ce qu'il appelle ailleurs l'instruction; le sentiment, c'est ce qui nous paraît être l'objet d'une intuition immédiate. Or tout ce qui nous fait plaisir, tout ce qui nous revient dans la mémoire, jusqu'aux propositions géométriques, tout cela nous croyons le sentir immédiatement, et nous le regardons comme donné en nature; mais, comme cela est évident pour les propositions géométriques, ce prétendu sentiment naturel a une origine rationnelle et artificielle; et, inversement, la raison peut faire disparaître les sentiments naturels (95 note 3).

Likewise, Brunschvicg has occasion to observe: "Le coeur, c'est le sentiment immédiat, l'intuition de ces principes. . . Le développement et la justification de ces vues de Pascal se trouvent dans le fragment "De l'esprit géométrique" (282 note 2). Grasped as the immediate intuition of a purely rational nature, sentiment may be construed as the first impressions of the soul; the pensées -- as distinct from pensées pures -- which are received from things.

Pascal continues this analysis in the "Discours sur les passions de l'amour":

A mesure que l'on a plus d'esprit, les passions sont plus grandes, parce que les passions n'étant que des sentiments et des pensées, qui appartiennent purement à l'esprit, quoiqu'elles soient occasionnées par le corps, il est visible qu'elles ne sont plus que l'esprit même, et qu'ainsi elles remplissent toute sa capacité (124).

Passions and sentiments belong, epistemically, uniquely to the soul. But in what sense? In the sense of their immediate perception by the disposition of the heart; they are ideas -- pensées. And these pensées are "...occasionnées par le corps..."; that is to say, pensées occur as the result of a receptivity of the soul capable of registering the intentions of the object. We can also call this ability the faculty of the heart. Most interesting is the reference to the body, "...le corps..." ("Discours" 124). Knowledge of the intellectual substance of the thing is impossible without the reality of the body. In the ontological order, the body is a medium between the subject and object; not that thought is of the body but rather that the body is a medium necessary to all exchanges with the extra-mental world. Otherwise, all that the subject would have is the innate ideas, the pensées pures of human intellection. Le Roy is therefore right in his appreciation of Pascal concerning the need to be thrown "...in medias res..." (67-8). We therefore conclude that in the category of heart, the body is necessary to the epistemic equation of subject and object insofar as it is only through the medium of the body that ideas (pensées) are occasioned in the manner of sentiments; in other words, as originating from things. This is the second observation on the nature of ideas as sentiment.

Hence the famous fragment of Pascal, "Tout notre raisonnement se réduit à céder au sentiment" (274) may be rephrased and interpreted in the following manner: all thought as ratiocination is subject to original premises and principles. Such principles belong to the epistemic reality of heart, of which there are two aspects, a corporal and a non-corporal. The corporal aspect may be termed 'sentiment' or

simple 'pensée' while the non-corporal aspect is deemed 'pensées pures'. It is therefore logical to conclude that the content of thought must originate from two sources -- such perceptions as are corporal of origin (pensées) and non-corporal of origin (pensées pure). The corporal intuitions engender the first principles of the physical sciences, whilst the non-corporal engender the mathematical sciences. Heart is a disposition oriented toward the immediate reception of the intellectual substance of things; it is the material operation of understanding at the intuitive level whose contents remain as yet undefined by the activity of reason. The first principles of the physical sciences articulate the epistemic reality of the heart as a category of extra-mental significance. Herein may be found the conjunction of first principles with the immediate experience of things.

A major difficulty for present day readers of Pascal is to confuse the language of his time with that of contemporary psychology. The act of heart is of a purely intellective nature and this may be observed even in the thought of Descartes who esteemed: "Par le mot penser, j'entends tout ce qui se fait en nous, de telle sorte que nous l'apercevons immédiatement par nous-mêmes...; c'est pourquoy non seulement entendre, vouloir, imaginer, mais aussi sentir, est la mesme chose icy que penser (Principes I, 9). Descartes likewise speaks of the passions, in particular in his last work entitled Les passions de l'âme. But he does so in an entirely different sense from that presently argued for Pascal. For Descartes, passion is an intellectual reality of the soul: it is the internal modification of the soul which is evidenced in the movement of the "esprits animaux" (I, 12). As such, Descartes forgoes the employment

of the term 'passion' to signify an extra-mental reality (Bréhier 102). Descartes states: "...il me semble qu'on peut généralement les définir, Des perceptions, ou des sentimens, ou des émotions de l'ame, qu'on raporte particulièrement à elle, & qui sont causées, entretenues & fortifiées par quelque mouvement des esprits" (I, 27). This is a purely intellectual acceptance of the term. In the philosophy of Pascal, we argue that the term, 'passion' entertains an extra-mental relation; that a passion must indicate the effect of the thing upon the subject and cannot be merely the intellectual response of the subject to the movements of "les esprits animaux".

Support for our reading of the Pensées may be found in the following commentaries, wherein it is observed: "...le coeur, pour Pascal, enveloppe la raison, s'il exclut le discours. Appréhender par le coeur, c'est appréhender selon la plus haute raison: c'est connaître et sentir à la fois, se livrer au vrai avec toute l'âme, intelligence et volonté" (Jolivet 63). For Pascal, the heart is a mode of intellection which aims at the immediate perception of things. Jolivet explains: "Le 'sentiment naturel', ou la connaissance par le coeur, devient ainsi, contrairement à ce que Descartes entendait sous le nom de connaissance par la lumière naturelle, une sorte d'intuition non intellectuelle" (65). Intuition of a non-intellectual nature must be elicited from an extra-mental source.

Our position is further clarified if we make reference to a work by Laporte entitled Le coeur et la raison selon Pascal. He states: "Par le coeur, connaître c'est sentir" (127); that is to say, the heart is the immediate intuition of an object, not at the corporal level of a physics

of experience but at the noetic level of a physics of understanding. Hence the famous passions de l'âme of Pascal are the non-intellectual appropriation of the object by the subject: it is the immediate experience of the object by the subject as extra-mental reality. An analogy may serve to explain. In the fragment entitled 'M. de Roannez' (276), Pascal discovers a truth of the world through experience -- sensations which shock the body and are received by the soul. These inchoate intentions of things comprise the first elements of a rational physiognomy. Their constitution grounds the first principles of the physical sciences.

Heart is therefore a structure, "... un ensemble organique, c'est-à-dire l'ordre..." (Pucelle 57). It is a structure of the essential truth and meanings available to man (Mesnard 163). It operates as a nexus of first intuitions and principles; intuitions or sentiments in the language of effects, principles or thoughts in the language of ideas. Such is the nature of heart. It is a mode of intellection in the most immediate and primary of acceptations, that of first perceptions or sentiments. Pascal clarifies these meanings in the "Discours", the heart as rational experience of the effect of things upon the thinking subject.

We may now turn to the epistemic reality of intellect. It is timely to recall the Pascalian text: "Roseau pensant. -- Ce n'est point de l'espace que je dois chercher ma dignité, mais c'est du règlement de ma pensée. Je n'aurai pas davantage en possédant des terres: par l'espace, l'univers me comprend et m'engloutit comme un point: par la pensée, je le comprends (348). Upon the basis of this and other texts, we presently

interpret the word 'pensée' to signify order: a synthetic function of understanding which enables the subject to establish a principle of unity for a disparate set of realities; specifically the ontological orders of body and soul. Intellect is the operation of understanding which places order and composition amongst the ideas of things. As a form of intellection, it is situated between the heart -- the immediate perception of the truth of things (pensées) or first principles of the physical sciences -- and reason -- the analytic function of understanding -- in order to gather together the ontological orders of subject and object, soul and body. Intelligence is thus synonymous with comprehension, the ability to include the many in one.

In the famous fragment entitled 'Disproportion de l'homme', Pascal writes:

Qu'il regarde cette éclatante lumière, mise comme une lampe éternelle pour éclairer l'univers, que la terre lui paraisse comme un point au prix du vaste tour que cet astre décrit et qu'il s'étonne de ce que ce vaste tour lui-même n'est qu'une pointe très délicate à l'égard de celui que les astres qui roulent dans le firmament embrassent. Mais si notre vue s'arrête là, que l'imagination passe outre; elle lassera plutôt de concevoir, que la nature de fournir. Tout ce monde visible n'est qu'un trait imperceptible dans l'ample sein de la nature. Nulle idée n'en approche. Nous avons beau enfler nos conceptions, au delà des espaces imaginables, nous n'enfantons que des atomes, au prix de la réalité des choses (72).

Here understanding attempts the inclusion of parts into a whole. It

situates and conjoins the perceptions of the senses with the immediate intuitions of the heart so as to perceive the composition of things; the order of the universe. Again, an equally famous passage of the Pensées clarifies the operation of the intellect:

Car enfin qu'est-ce que l'homme dans la nature? Un néant à l'égard de l'infini, un tout à l'égard du néant, un milieu entre rien et tout. Infiniment éloigné de comprendre les extrêmes, la fin des choses et leur principe sont pour lui invinciblement cachés dans un secret impénétrable, également incapable de voir le néant d'où il est tiré, et l'infini où il est englouti (72).

Hence we are not mistaken in our conclusion: the intellect discerns order, sequence, and position; it sets horizons and limits to things.

And this is possible only to the author of the universe: "Toutes choses sont sorties du néant et portées jusqu'à l'infini. Qui suivra ces étonnantes démarches? L'auteur de ces merveilles les comprend. Tout autre ne le peut faire" (72). The author of these marvels comprehends the order of being insofar as the universe of things constitutes a totality: an order which may be included in the divine intelligence.

Pascal clarifies: "De ces deux infinis de sciences, celui de grandeur est bien plus sensible, et c'est pourquoi il est arrivé à peu de personnes de prétendre à traiter toutes choses....Mais l'infini en petitesse est bien moins visible. Les philosophes ont bien plutôt prétendu d'y arriver, et c'est là où tous ont achoppé..." (72). He explains:

"On se croit naturellement bien plus capable d'arriver au centre des choses que d'embrasser leur circonférence; l'étendue visible

du monde nous surpasse visiblement; mais comme c'est nous qui surpassons les petites choses, nous nous croyons plus capables de les posséder, et cependant il ne faut pas moins de capacité pour aller jusqu'au néant que jusqu'au tout;..." (72).

Hence comprehension is an endeavour, an act or operation which attempts to entertain and encompass the tout. It is an act of understanding which aims at inclusion. There ensues the affirmation, "Notre intelligence tient dans l'ordre des choses intelligibles le même rang que notre corps dans l'étendue de la nature" (72). To intelligence, therefore, corresponds the term 'comprendre' for in this term is inherent the notion of inclusion. Intellect is the attempt to harmonize and synchronize the apparent discontinuities which exist in the world of things, such discontinuities as are reflected in the thoughts of man. In this movement toward synthesis and unity, emphasis is placed on qualitative as opposed to quantitative judgements. These qualitative judgements are the especial office of the intellect, for it is the role of the intellect to perceive instances of finality, "...la fin des choses et leur principe..." (72). These are the correct judgements of the world.

The category of intellect is placed directly in contact with the order of the body insofar as the body is recognized to be the first evidence of extra-mental reality; indeed, first evidence of all intentionis rei. This is so largely because the body forms a unity of its own and it is this unity which implicates the subject in the world. Pascal affirms:

"La première chose qui s'offre à l'homme quand il se regarde, c'est son corps, c'est-à-dire une certaine portion de matière qui lui est propre. Mais, pour comprendre ce qu'elle est, il

faut qu'il la compare avec tout ce qui est au-dessus de lui et tout ce qui est au-dessous, afin de reconnaître ses justes bornes" (72 note 1).

Hence the intellect and the body have at least the following in common: they both constitute intermediaries in the ontological orders of reality; the nature of material acts of conception and the nature of material things. If, therefore, all pensées or first principles of the physical sciences -- as distinct from pensées pures and the first principles of the mathematical sciences -- are occasioned by the body in cooperation with the heart, the order of the body is likewise necessary for the intellect to the extent that the body is the first experience of a noetic unity. For the intellect, the body occasions an original intentional experience of totality, of unity and synthesis; it is the first object of cognition as well as medium of the rational intentions of things.

There follows the categorial disposition named 'reason'. Pascal explains reason as the act of raisonnement or ratiocination. A first observation is that reason cannot qualify; it cannot make qualitative judgments. Such an office belongs exclusively to the intellect. "La raison a beau crier, elle ne peut mettre le prix aux choses (82). And this ensues because reason is devoid of all considerations of finality:

Mais peut-être que ce sujet passe la portée de la raison.

Examinons donc ses inventions sur les choses de sa force. S'il y a quelque chose où son intérêt propre ait dû la faire appliquer de son plus sérieux, c'est à la recherche de son souverain bien. Voyons donc où ces Ames fortes et clairvoyantes l'ont placé, et si elles en sont d'accord (73).

Pascal reiterates: "Il faudrait avoir une règle. La raison s'offre, mais elle est ployable à tous sens; et ainsi il n'y en a point" (274).

Reason is analysis. This consequence is reflected in the primary articulation of reason, the analysis of numbers:

Car la connaissance des premiers principes, comme qu'il y a espace, temps, mouvement, (est) aussi ferme qu'aucune de celles que nos raisonnements nous donnent. Et c'est sur ces connaissances du coeur et de l'instinct qu'il faut que la raison s'appuie, et qu'elle y fonde tout son discours. (Le coeur sent qu'il y a trois dimensions dans l'espace, et que les nombres sont infinis; et la raison démontre ensuite qu'il n'y a point deux nombres carrés dont l'un soit double de l'autre. Les principes se sentent, les propositions se concluent; et le tout avec certitude, quoique par différentes voies) (282)

Reason is the ability to conclude (282) on the basis of a series of propositions. Is this not precisely the act of ratiocination? This agency of reason is illustrated in the following extract wherein Pascal again speaks of numbers, space, and the geometer's understanding thereof:

Il n'y a point de géomètre qui ne croie l'espace divisible à l'infini. On ne peut non plus l'être sans ce principe qu'être homme sans âme. Et néanmoins il n'y en a point qui comprenne une division infinie; et l'on ne s'assure de cette vérité que par cette seule raison, mais qui est certainement suffisante, qu'on comprend parfaitement qu'il est faux qu'en divisant un espace on puisse arriver à une partie indivisible, c'est-à-dire qui n'ait aucune étendue ("De l'esprit géométrique" 178).

The famous étendue of Descartes is the special object of ratiocination;

it is the ability to divide and analyse into composite parts. Of interest is the Pascalian employment of the term 'raison' to signify the rational principle of analysis. When Pascal writes, "Ecrire contre ceux qui approfondissent trop les sciences, Descartes" (76) his complaint enjoins this movement of reason appropriating unto itself the offices of the intellect. His criticism focuses upon the attempt by reason to engage in activities which belong to other functions of understanding.

Reason is the mode of intellection which discourses upon the immanent nature of ideas. At this level of noesis, proof consists in the clear explication of an idea; the act of ratiocination necessary to the elucidation of the objective content of the idea. It is the proposition in the language of Pascal (282). Pascal explains:

On peut avoir trois principaux objets dans l'étude de la vérité: l'un, de la découvrir quand on la cherche; l'autre, de la démontrer quand on la possède; le dernier, de la discerner d'avec le faux quand on l'examine.

Je ne parle point du premier; je traite particulièrement du second, et il enferme le troisième. Car, si l'on sait la méthode de prouver la vérité, on aura en même temps celle de la discerner, puisqu'en examinant si la preuve qu'on en donne est conforme aux règles qu'on connaît, on saura si elle est exactement démontrée ("De l'esprit géométrique" 164).

Reason is a méthode. It is a series of rules for the proper conduct of the analytical faculty. Pascal continues: "La géométrie, qui excelle en ces trois genres, a expliqué l'art de découvrir les vérités inconnues; et c'est ce qu'elle appelle analyse, et dont il serait inutile de discourir

après tant d'excellents ouvrages qui ont été faits" ("De l'esprit géométrique" 164). The propositions of geometry and algebra, indeed any statement in the propositional form, constitute a method of analysis ("De l'esprit géométrique 168). Hence we assert that reason performs the task of enumeration. It is the setting out in detail of the parts of a whole.

Thus the famous allegation against Pascal which observes a systematic opposition between the rational agency of heart and the rational agency of reason rests upon a serious misreading of the texts: such an interpretation fails to grasp the rational physiognomy of Pascal. The rational physiognomy is an order which facilitates the perception of first principles and immediate intuitions through the function of heart (282); this is distinct from the function of reason which involves the ability to particularize, to effect an analysis.

Chevalier writes:

Toute la doctrine pascalienne de la connaissance est dominée par la distinction, ou mieux par l'opposition, de la raison et du coeur. La raison, c'est le discours, ou le raisonnement; c'est cette faculté qui veut toujours démontrer par ordre, comme en géométrie, qui veut tout prouver, jusqu'aux principes, qui avancement lentement et comme par degrés, en s'appuyant sans cesse sur la mémoire. Le coeur, c'est l'instinct, ou l'appréhension immédiate des principes; c'est la partie la plus intime de l'âme; la pointe extrême où connaissance et sentiment ne font qu'un, parce qu'ils coïncident avec leur objet, par sympathie ou par amour, en un 'sentiment intérieur et immédiat' (58).

The presumed conflict between reason and heart disappears as soon as one sees in the faculty of heart an act of conception of first principles, with reason but a poor instrument of partition empty of originative power. This point may be illustrated in the following distinction between a series of ideas which are éclairantes and a series of ideas which are éclairées. Le Roy states:

Pour Descartes, il est en effet deux types de vérités, les vérités simples et les vérités complexes; mais toutes se présentent essentiellement sous forme d'idées claires et distinctes. Les premières, qui sont objets d'intuition, ne peuvent être mises en doute en raison de leur évidence intrinsèque; elles manifestent à l'esprit une clarté qui leur appartient; l'esprit perçoit immédiatement en elles la lumière. Les vérités qui apparaissent au terme d'une déduction s'avèrent, à leur tour, également certaines, car elles s'imposent comme des conclusions nécessaires; mais elles ne rayonnent pas de la même clarté; leur lumière est une lumière d'emprunt, qui leur vient d'affirmations posées avant elles. Les idées vraies sont donc toujours, aux yeux de Descartes, des idées claires ou des idées éclairées. Pour Pascal, qui a ses vues propres, les vérités fondamentales sont des idées éclairantes (69).

Reason, therefore, is by its nature blind. It is "stupid" to the extent that it can only serve to clarify a pre-given state of affairs; it may not serve to originate correct judgements of things from the contents of its own agency. Such agency belongs to other modes of intellection. It is upon such grounds that reason may easily be fooled by the activity of other operations of understanding: "Plaisante raison qu'un vent manie,

et à tout sens!" (82). This results because reason is not only the faculty of division but it is also the faculty of instrumentality. Reason requires the principles of heart, the judgements of intellect to supply it with intentions -- the formal content of ideas -- upon which to work its analyses. In a word; reason is ignorant even if it is intelligent. True wisdom lies elsewhere, in the modes of the heart and the intellect; alternate faculties of a rational physiognomy. Mesnard agrees with our position: "La raison à elle seule ne peut rien construire: elle est comme une roue folle dont le mouvement demeure inefficace. Pour qu'elle entraîne une progression, il faut qu'elle trouve un point d'appui. Le coeur le lui fournira" (200).

Hence as stated in the introduction, heart and reason are distinct but not opposed faculties of understanding. Reason is the specific discursive clarification of the heart and not an antithesis to the function of the generation of first principles. Hence we strongly disagree with the analysis of Harrington which states: "Pascal renonce donc à faire passer quelque vérité que ce soit du coeur dans l'esprit. Il se contente d'énoncer les règles -- naturelles, saines et communes -- qui permettent de faire passer les vérités terrestres dans l'entendement" (7). Reason need not be understood in such terms. Our attempt at an understanding of Pascal has led to a complementary interpretation of the faculties of heart and reason.

The immediate effect of the present analysis is the discovery that reason has only an indirect and tenuous grasp of things. Extra-mental realities are present to the heart through the agency of intentio rei;

they are then present to reason as a faculty of analysis. Reason elicits intentions from the heart in order to ascertain a "material" of ratiocination -- the product of which is the content of an idea in the objective sense. Indeed this is precisely the Cartesian programme, to understand the idea matériellement insofar as it constitutes the "material" of thought (Méditations 7).

During the analysis of heart, intellect, and reason we have stressed the role of the material constitution of the universe and the principles which we obtain from them. Now custom and instinct also belong to the material aspect of reality, but more specifically to that of our body. When Pascal makes reference to custom he does so in conjunction with knowledge obtained through the body: "Qui a démontré qu'il sera demain jour, et que nous mourrons? Et qu'y a-t-il de plus cru? C'est donc la coutume qui nous en persuade; c'est elle qui fait tant de chrétiens, c'est elle qui fait les Turcs, les païens, les métiers, les soldats, etc..." (252). An amplification of the notion of automate began this passage:

Car il ne faut pas se méconnaître: nous sommes automate autant qu'esprit; et de là vient que l'instrument par lequel la persuasion se fait n'est pas la seule démonstration. Combien y a-t-il peu de choses démontrées! Les preuves ne convainquent que l'esprit. La coutume fait nos preuves les plus fortes et les plus crues; elle incline l'automate, qui entraîne l'esprit sans qu'il y pense. Qui a démontré qu'il sera demain jour, et que nous mourrons? Et qu'y a-t-il de plus cru? C'est donc la coutume qui nous en persuade; c'est elle qui fait tant de

chrétiens, c'est elle qui fait les Turcs, les païens, les métiers, les soldats, etc.... Enfin il faut avoir recours à elle quand une fois l'esprit a vu où est la vérité, afin de nous abreuver et nous teindre de cette créance, qui nous échappe à toute heure; car d'en avoir toujours les preuves présentes, c'est trop d'affaire. Il faut acquérir une créance plus facile, qui est celle de l'habitude, qui, sans violence, sans art, sans argument, nous fait croire les choses, et incline toutes nos puissances à cette croyance, en sorte que notre âme y tombe naturellement. Quand on ne croit que par la force de la conviction, et que l'automate est incliné à croire le contraire, ce n'est pas assez. Il faut donc faire croire nos deux pièces: l'esprit par les raisons, qu'il suffit d'avoir vues une fois en sa vie; et l'automate, par la coutume, et en ne lui permettant pas de s'incliner au contraire (252).

Brunschvicg explains this opposition between reason and custom, here l'esprit and l'automate, through the following specifications:

...automatisme s'oppose à réflexion. Suivant Descartes, toute pensée entraînant la conscience de soi est réfléchie: l'automatisme devient le caractère propre de la vie corporelle, l'automate est identifié au corps auquel seront attribuées d'ailleurs toutes les fonctions spontanées de l'intelligence, celles qui se développent par habitude et qui agissent mécaniquement en nous. Ainsi s'explique l'opposition que Pascal établit entre l'automate et l'esprit (252 note 1).

It is not the case that custom and instinct are irrational responses on the part of the subject to the object; rather, custom and instinct are

special forms of reflection. Custom and instinct are cognitional dispositions conjoined immediately with the agency of the body.

Rational custom is the clearest example of the categorial dispositionality of concepts. The automate is the machine, the corporal reality of man as body itself. Hence as the notion of custom would imply, the material reality of a physical body is required for knowledge, for persuasion, for an understanding in an habitual form. Pascal supplies the following clarification of the notions of automate and machine: "Ordre. -- Après la lettre 'qu'on doit chercher Dieu' faire la lettre 'd'ôter les obstacles', qui est le discours de la 'machine', de préparer la machine, de chercher par raison" (246). Brunschvicg explains:

Pascal adopte la célèbre expression cartésienne, en même temps d'ailleurs que la doctrine des bêtes automates ou animaux-machines. Tout ce qui ne procède pas en nous de la pensée réfléchie, obéit à un mécanisme nécessaire dont l'origine est le corps, et qui se traduit dans l'âme même par l'imagination et la passion. Pour ôter les obstacles qui viennent du corps, il faut donc plier le corps, fabriquer en nous une nature artificielle qui suive, au lieu de combattre, la direction de la volonté réfléchie. La coutume qui, abandonnée au caprice de nos tendances spontanées, était une 'puissance trompeuses' devient, une fois qu'elle est réglée, un 'moyen de croire' (246 note 1).

Custom, therefore, is a pathway to knowledge and understanding based upon the exigencies of the body, the automate. It is reflective knowledge but of an order separate and distinct from the intellectual order. The body

as ontological order is necessary for custom to transpire; it is an understanding which occurs insofar as there be repetition and persuasion. It is the form of intellection known as habit, the especial creation of disposition.

Le Roy has elucidated these texts of Pascal using a method of analysis which is not foreign to the purposes of the present study. In keeping with an empirical approach, he observes in Pascal two primary employments of the term 'raison': that of habit and that of invention, "...la raison en tant qu'ajustée à un certain ordre de connaissances, et la raison en tant que s'ajustant à un ordre nouveau" (75). This reference to raison as a form of intellection specifically adjusted to an order of being, we presently accept as the dispositional principle of custom. Le Roy supports this interpretation: "Il faut voir en elle une faculté dont l'office est de s'adapter au réel, et qui, dès lors, a pour obligation de s'ouvrir, par un effort d'élargissement progressif, à la mesure des choses" (74-75). Custom is an intelligent response to the extra-mental reality as gathered through the physical origin of the intentions of things. It is therefore entirely empirical in nature. Its nature may forthwith be described as a sort of meditation upon experience, for it is a reflective knowledge of the world acquired through sensory experience. We define custom to mean the mediated response of the subject to the intention of things as known through the body.

Finally, there is instinct. Instinct is a principle analogous to heart. It is an operation of understanding which functions within the

immediacy of first perceptions. Coupled with the heart by Pascal himself (281), it is the perception of first effects. As such, instinct is a principle of understanding insofar as it is the immediate contact of the subject with things; it occurs at the peripherics of experience -- of physical sensation itself. Heart knows through sentiment, the immediate intuition of first principles and as such constitutes the science of causes. Instinct, on the other hand, is pure immediacy of effect. Unlike custom, however, instinct constitutes an immediate grasp of things. It is sensation. This position is supported by Mesnard, who observes that both instinct and heart originate in lived experience (88-89). However their difference lies in the fact that the heart is a principle of genesis, of activity (Mesnard 166) whilst the instinct is a principle of reaction.

Hence instinct, while a principle of understanding is not active but reactive in nature. It is therefore not surprising to discover that its mode of intellection is the immediacy of the intentions of the body; that is to say, the automate. The body is the medium of communication between the subject and the object. In the categorial disposition of instinct, the subject receives sensations in a passive stance, notwithstanding the many auxiliary mechanical functions which may accompany the reception of such sensations. This effect is made clear by Brunschvicg: "...la raison est un instrument universel; l'instinct est spécial, il correspond à une habitude particulière de la machine" (341 note 1). When Pascal states, "Instinct et raison, marques de deux natures" (344) he is setting forth two distinct modes of intellection, one of which operates through a long series of operations of ratiocination; the other, like heart, in the

immediacy of a perception, a physical sensation.

It is therefore quite logical to assume that repetition is the especial quality of instinct. Pascal observes:

Si un animal faisait par esprit ce qu'il fait par instinct, et s'il parlait par esprit ce qu'il parle par instinct, pour la chasse, et pour avertir ses camarades que la proie est trouvée ou perdue, il parlerait bien aussi pour des choses où il a plus d'affection, comme pour dire: 'Rongez cette corder qui me blesse, et où je ne puis atteindre' (342).

Instinct is a form of rational comprehension empty of creative agency. Unlike custom, it is devoid of originative power. Pascal continues: "Le bec du perroquet qu'il essuie, quoiqu'il soit net" (343). This notion of repetition completes the elucidation of the concept of instinct. The continual repetition which occurs in respect of sensory experience is the primary quality of instinct, for it is through the ability of the subject to repeat actions based upon immediate sensation that the operatinality of instinct is rendered meaningful; that is to say, it attains directedness.

These then are the five modes of intelligibility. They are modes or forms of unity which receive and categorise the nature of the extra-mental, the intentio rei. Their grasp of the extra-mental reality is assured through the order of the body.

Chapter 4

"L'automate"

What then is the body for Pascal? We might respond, the sensual order of being. But such a response is vague and imprecise. A more significant response may be the automate: the physical mechanism of the sensual order. And Pascal expressly refers to the body in these terms. Hence it is not without purpose that we pause and examine briefly the consequence of this choice.

Pascal acquired the notion of automate from Descartes (246 note 1). This notion of automate is centered upon a prior analysis of Descartes, wherefore the separation and primacy of the ontological order of the soul from the ontological order of the body is manifestly stated:

Il me semble aussi que ce biais est tout le meilleur que nous
puissions choisir pour connoistre la nature de l'ame, & qu'elle
 est une substance entierement distincte du corps: car, examinant
 ce que nous sommes, nous qui pensons maintenant qu'il n'y a rien
hors de nostre pens e qui soit veritablement ou qui existe, nous
 connoissons manifestement que, pour estre, nous n'avons pas
 besoin d'extension, de figure, d'estre en aucun lieu, ny
 n'aucune autre telle chose qu'on peut attribuer au corps, & que
nous sommes par cela seul que nous pensons; & par consequent,
 que la notion que nous avons de nostre ame/ ou de nostre pens e
 precede celle que nous avons du corps, & qu'elle est plus
 certaine, veu que nous doutons encore qu'il y ait au monde aucun
corps, & que nous sçavons certainement que nous pensons

(Descartes, Principes I, 8).

The evidence of thought precedes the evidence of material things and the latter's attendant qualities. There is inherent in this position a total indifference with respect to the transcendent aspect of knowledge, knowledge as it pertains to things in an extra-mental sense. It is observed by Allard:

Le rôle de la vraie philosophie doit donc être avant tout de purifier notre esprit de cette influence charnelle et de nous faire prendre conscience de la vraie action de l'entendement. En un mot, le point de départ de la métaphysique consiste à déraciner de notre esprit le 'préjugé' réaliste basé sur l'union de l'âme et du corps (99).

This difficulty finds expression in an ontological order which contracts the body into a pure, unitary, and reductive notion of reason -- replacing the lived experience of things with the abstract notion of material being in extension. This abstract notion Descartes defines in the following manner: "Que chaque substance a un attribut principal, & que celui de l'ame est la pensée, comme l'extension est celui du corps" (Principes I, 53) or as he notes in a further text, "Comment on peut avoir des notions distinctes de l'extension & de la pensée, en tant que l'une constitue la nature du corps, & l'autre celle de l'ame"; it is because "Nous pouvons aussi considerer la pensée & l'estendue comme les choses principales qui constituent la nature de la substance intelligente & corporelle..." (Principes I, 63). These observations are supported by his statement in the Méditations concerning the nature of material substance:

Premièrement, afin de savoir que généralement toutes les

substances, c'est-à-dire les choses qui ne peuvent exister sans être créées de Dieu, sont de leur nature incorruptibles, et ne peuvent jamais cesser d'être, si elles ne sont réduites au néant par ce même Dieu qui leur veuille dénier son concours ordinaire. Et ensuite afin que l'on remarque que le corps pris en général est une substance, c'est pourquoi aussi il ne périt point; mais que ~~le~~ corps humain, en tant qu'il diffère des autres corps, n'est formé et composé que d'une certaine configuration de membres; et d'autres semblables accidents; et l'âme humaine au contraire n'est point ainsi composée d'aucuns accidents, mais est une pure substance (15-6).

The Cartesian notion of the body is thus an abstraction or, as Descartes himself has observed, it is an object of "...la raison toute pure..." (Principes III, 1). He reaffirms this conclusion at the end of the second part of the Principes:

Car j'avoue franchement icy que je ne connoy point d'autre matiere des choses corporelles, que celle qui peut estre divisée, figurée & meue en toutes sortes de façons, c'est à dire celle que les Geometres nomment la quantité, & qu'ils prennent pour l'objet de leurs demonstrations; & que je ne considere, en cette matiere, que ces divisions, ses figures & ses mouvemens; & enfin que, touchant cela, je ne veux rien recevoir pour vray, sinon ce qui en sera deduit avec tant d'évidens, qu'il pourra tenir lieu d'une demonstration Mathematique (II, 64).

Descartes reduces the ontological order of the body to a pure category of thought. This conclusion is reiterated in the following passage wherein

Descartes speaks of the ideas of things and their primary qualities:

Pour ce qui est des autres qualités dont les idées des choses corporelles sont composées, à savoir l'étendue, la figure, la situation, et le mouvement de lieu, il est vrai qu'elles ne sont point formellement en moi, puisque je ne suis qu'une chose qui pense; mais parce que ce sont seulement de certains modes de la substance, et comme les vêtements sous lesquels la substance corporelle nous paraît, et que je suis moi-même une substance, il semble qu'elles puissent être contenues en moi éminemment (Méditations 45).

To contain the truth of an idea eminently, an idea such as extension, is to affirm its nature as essentially that of a category of thought.

Further, the body is qualified as entirely passive in nature, with activity occurring uniquely at the level of the soul or thinking substance:

Par le corps j'entends tout ce qui peut être terminé par quelque figure, qui peut être compris en quelque lieu, et remplir un espace en telle sorte que tout autre corps en soit exclu: qui peut être senti ou par l'attouchement, ou par la vue, ou par l'ouïe, ou par le goût, ou par l'odorat: qui peut être mû en plusieurs façons non par lui-même, mais par quelque chose d'étranger duquel il soit touché, et dont il reçoive l'impression; Car d'avoir en soi la puissance de se-mouvoir, de sentir, et de penser, je ne croyais aucunement que l'on dût attribuer ces avantages à la nature corporelle; au contraire je m'étonnerais plus-tôt de voir que de semblables facultés se

rencontraient en certains corps. (Méditations 27).

Hence for Descartes, all physical qualities are subject to a reduction along the lines of immanent objectivity -- the idea in the objective sense -- toward the methodological requisites of the Cogito. The consequence of this position is that the pure ideas of Reason -- the innate ideas -- must impose understanding and form upon the body as an objective content of idea through the category of extension. Body has become an object of mind, an immanent objectivity subject to the categories of predication; in a word, it is but a distinction of reason. This is quite separate from the question of the real existence of things and the actual operations of thought, the materialiter of thought itself. In Descartes' system of thought, there are no intentio rei received by the subject from the intellectual substance of the thing.

Allard reasons:

La théorie cartésienne des natures simples, de l'innéisme des idées, sa conception des idées-tableaux sans référence immédiate au réel extra-mental seront une généralisation de sa façon de concevoir l'objet des mathématiques. Comme en mathématiques, l'intelligibilité de la science sera indépendante de l'expérience sensible. Les idées devront acquérir une simplicité semblable à celle des données mathématiques, ce qui leur confrèrera le même caractère exhaustif (49).

Hence there are two difficulties with the present usage of the term 'body'. The first regards the passivity of the body with respect to the knowledge of things and the second deals with the ideal nature of the body as material substance. The problem of passivity is one of the

transference and transmission of intentions from an extra-mental reality to the rational subject, whilst the ideal nature of material substance in extension deals with the question of how a pure category of mind may have knowledge of extra-mental things. The Cartesian election of ideas in the objective sense together with the devaluation of the body as primary source of knowledge of things concludes the following result: the only form of objectivity to which the soul may attach legitimacy is that of the idea in the objective sense. How therefore may the body as primary source of all intentio rei be said to transmit the intentions of things to the perceiving subject if its nature is prescribed as being entirely passive and its essential attribute of extension is received from the soul?

It would seem to be the case that neither alternative would satisfy Pascal, and that a more active role must be envisioned in the Pascalian system of thought, a role which will implicate the cognitive nature of the body as physical mechanism. Moreover, Pascal clearly states the duality of body and soul in the following passage, wherein it is observed:

Et ce qui achève notre impuissance à connaître les choses, est qu'elles sont simples elles-mêmes et que nous sommes composées de deux natures opposées et de divers genre, d'âme et de corps. Car il est impossible que la partie qui raisonne en nous soit autre que spirituelle; et quand on prétendrait que nous serions simplement corporels, cela nous exclurait bien davantage de la connaissance des choses, n'y ayant rien de si inconcevable que de dire que la matière se connaît soi-même; it ne nous est pas possible de connaître comment elle se

connaîtrait (72).

He elaborates:

Qui ne croirait, à nous voir composer toutes choses d'esprit et de corps, que ce mélange-là nous serait très compréhensible? C'est néanmoins la chose qu'on comprend le moins. L'homme est à lui-même le plus prodigieux objet de la nature; car il ne peut concevoir ce que c'est que corps, et encore moins ce que c'est qu'esprit, et moins qu'aucune chose comme un corps peut être uni avec un esprit: C'est là le comble de ses difficultés, et cependant c'est son propre être... (72).

Given the admission that Pascal assumed the Cartesian notion of automate and following upon the analysis of the order of the body as ontological basis of an understanding of the automate, how then may we argue the case that the body is indeed the active element of noesis?

Conclusion

To answer this question, we must refer to the rational physiognomy of Pascal. In the first chapter, we affirmed that the material act of conception is the veritable formal ground for a true understanding of things. These acts of conception were then ascribed specific directedness according to the function of the modes of intellection; the categorial dispositions of understanding. Now we are faced with the task of delineating the nature of the body as source of all intentions of things.

Allard offers the intimation of a response with the qualification of the body as physical mechanism:

L'explication cartésienne des facultés sensibles 'en tant qu'elles sont des parties du corps' est purement mécanique. Il n'est plus question de distinguer ces facultés par leur objet formel comme en philosophie scholastique, car il n'y a plus de qualités sensibles: 'il est certain que le nombre infini des figures suffit à exprimer toutes les différences des choses sensibles'. Tous les sens, externes et internes, ont donc le même objet: la figure; et le corps humain n'étant lui-même que l'étendue, la distinction des facultés sensibles ne peut être que d'ordre local. Bien plus, la négation des qualités sensibles dans le corps, et donc dans la faculté sensible, conduit à la négation de l'activité immanente des sens et, partant, de la connaissance sensible proprement dite: le mouvement de ces facultés est d'ordre purement physique (51-2).

Compared to this schema, what would be the Pascalian counterproposal? The five modes of intellection attain relevance with respect to the extra-mental world insofar as the order of the body is directly involved in the process of understanding as instrument of noesis; that is to say, as automate.

Allard observes: "Pourquoi donc parler du mathématisme? Pour la raison bien simple que la généralisation cartésienne de la méthode mathématique a pour conséquence première l'assimilation de toute science à son modèle, plus particulièrement le nivellement de l'intelligibilité et de la certitude" (84-5). There could not be five modes of intellection if the body as physical mechanism did not play the decisive role in noesis. The automate is the sole physical structure capable of mediating the intentional relations of subject and object, for through its mechanism are directed the five categories of disposition. Hence, the Pascalian response to Descartes is the valorisation of the body as automate; this choice enables the edification of the five pathways of understanding. In the thought of Pascal, we observe an alternate relation of body and soul, a relation in which the body is actively and necessarily involved in the correct judgement of things. Through the physical mechanism of the body, the soul escapes reductionism. We may thereby maintain a multiplicity of pathways directed toward the understanding of the extra-mental world.

We now conclude the following: in the thought of Pascal, the order of the body facilitates the elucidation of true knowledge of things to the extent that it activates the multiplicity of pathways to knowledge --

that it prevents the "...nivellement de l'intelligibilité... (Allard 84-5) to one order of conceptual directedness. The physical mechanism of the body (automate) is necessary to noesis insofar as it maintains the differential nature of thought: the five modes of intellection. Magnard observes:

Introduire une loi de totalité conduit à substituer à la causalité analytique un principe d'actions réciproques.... La structure ainsi définie donnera lieu à découvrir des analogies entre des totalités aperçues en des plans différents; plus précisément, à partir de la structure propre à la totalité que constitue l'homme, on cherchera à découvrir des totalités qui aient avec elle 'de la consonance' -(67-8).

The body is that physical totality which helps discover a series of rational totalities (dispositions) susceptible of the true understanding of things. Let us recall the argument of Guittou:

Disons en résumé que pour Pascal l'union des contraires s'opère dans une structure hiérarchique, non par juxtaposition et opposition, non par confusion ou absorption, non par continuité et conciliation. C'est que les contraires doivent être considérés comme dans un espace: ils ne sont pas sur le même plan, ils n'ont donc même pas la même valeur, ni la même fonction (54).

The physical mechanism of the automate actively shapes the very possibility of intellection as multiple forms of significance, multiple modes of directedness. Without the body, there could be no intellection, there could be no rational physiognomy; we would be left uniquely with the immanent objectivity of a content of idea, a Cogito. Without the

body, there would be thought without directedness; there would be material acts of conception but no understanding of things; knowledge but no wisdom. Harrington clarifies this consequence:

En outre, dans 'Raisons des Effets', Pascal traite d'un mode d'explication qui consiste à expliquer une différence par une autre, ou une ressemblance par une autre. La relation entre le fait expliqué et le fait qui explique n'est ni précisément déductive ni précisément inductive. La valeur explicative des raisons dépasse ces normes quantitatives et se situe dans le domaine qualitatif (57).

The order of the body as automate is the order of effects (effets). It is necessary to the elaboration of a rational physiognomy insofar as it is the differentiating principle for the modes of intellection -- a differentiation which leads the subject to acquire wisdom.

In this manner, we are able to reconcile the apparent dualism of Pascal with the ontological requisites of the automate. Pascal recognized the duality of body and soul but this duality is surpassed in the functionality of the automate as principle of differentiation. We argue the case that in the thought of Pascal, the physical reality of the body (automate) is conjoined with the modes of intellection (disposition) in order to attain the correct judgement of things. And this effect may be achieved to the extent that the material acts of conception effectively convey the intellectual substance of the thing to the soul through the medium of the automate; the physical mechanism of the ontological order of the body.

In working out the rational physiognomy of Pascal, we have assumed a circuitous route toward the elucidation of this concept and for good reason. The ontological order of the body is the most difficult order to explain, prove or elucidate. Pascal himself experienced the extreme difficulty of such an endeavour, for is not the body of an order foreign to the soul and hence inaccessible for the operations of the soul? We therefore reasoned to approach the subject through a form of indirection, arguing the case for a theory of ideas which then entails the order of body as necessary to the comprehension of things. This approach was required to the extent that thought as actuality is comprised of ideas in the material sense. We then observed that the material actuality of conception is itself conditioned by the modes of intellection -- that which we have deemed dispositional categories of understanding. And these dispositions are themselves witness to the effect of the order of the body in noesis. This effect is the repartition of intellection into five modes. It is the physical mechanism of the body which is the principle of differentiation in noesis. The ontological order of the body is the veritable ground for a rational physiognomy in the Pensées of Pascal.

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