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EFFECTIVE HISTORY: ON THE GENEALOGY OF MODERN RATIONALITY

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Abstract

This thesis explores a contested issue in 20th century critical discourse: the nature and meaning of the historicity of rationality. It elaborates this issue in dialogue with the critical theory of Adorno and Horkheimer and the poststructuralist genealogy of Michel Foucault.

For the Adorno and Horkheimer of the *Dialectic of Enlightenment*, the historicity of rationality manifests itself in the form of a development, the development of instrumental rationality. This development stretches from what they postulate as its origin in humanity's pre-history to the present at which they write; it encompasses the vast diversity of Western modes of thought, subsuming and organizing them according to its single logic. For Foucault, in contrast, the historicity of rationality implies constant change and discontinuity. The succession of Western modes of thought exhibits no such linear development; it constitutes a parade of incompatible interpretations. The genealogy of these interpretations reveals their contingency, and discloses the force required for their institution; it thereby makes history "effective" in a way foreclosed by more "traditional" histories, which, by pursuing origins, tend to reinforce or reify the present.

The merits of these theoretical arguments are subsequently demonstrated in genealogical analyses of two events in the history of rationality: Francis Bacon's institution of modern science, and René Descartes' articulation of the "cogito." The readings presented in these chapters emphasize the singularity of these authors' work. They demonstrate the break that Bacon and Descartes instituted with respect to their predecessors, and identify the force that the institution of those breaks required. Crucial to these readings were their attention to the *ascetic* dimension of Bacon and Descartes' discourses, which revealed that 'rationality' required a series of practical exercises that would transform the would-be scientist or philosopher, and constitute them in a new mode of having the capacity for true knowledge.

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Introduction

This thesis participates in the critical project of questioning modern rationality and its relation to power. In the twentieth century, this critique was articulated in a number of ways, amongst which two stand out for their widely recognized importance: the critical theory of Theodor Adorno and Max Horkheimer, and the post-structuralism of Michel Foucault. This thesis aims to enhance our understanding of these authors' respective critiques of modern rationality by focusing upon one crucial issue at which they appear to diverge: the nature and meaning of the historicity of rationality. To be more precise, this thesis asks whether the entanglement of rationality with power is better understood in its timelessness and continuity or in the diversity and discontinuity of its forms. In pursuing an answer to that question, this thesis also takes up a closely related inquiry into whether the entanglement of rationality with power is more effectively critiqued by searching for the origin of rationality's departure from legitimacy, or for the specific moments at which a new link is forged between an element of knowledge and a mechanism of power.

The work of Adorno and Horkheimer would seem to argue for the desirability of the first kind of approach. In their *Dialectic of Enlightenment*, they assert that the rationality through which humanity has related to and created its world, from its very dawn, was characterized by a nascent instrumentality which has slowly but steadily bloomed until the present is "radiant with triumphant calamity" (1). In their account, the history of reason is the history of a single dialectical development; any moment upon which one fixes one's gaze exhibits the logic of the whole. The specificity of a particular mode of rationality, and with it, the specific modality of the relation between subjects and objects of knowledge at a particular moment, is subordinated to its exemplification of the

continuous and progressive development of instrumental rationality. For Foucault, on the other hand, rationality's persistent entanglement with power throughout history is not to be understood as the dialectical unfolding of a single logic. On the contrary, the specific forms and modalities of that entanglement undergo constant transformation; they are modified and displaced, not according to the internal organization of a continuous development, but rather by the irruption of irreducibly singular historical events, which make any configuration of power/knowledge a fragile and temporary thing. Nor is it the case, for Foucault, that rationality's entanglement with power is the result of an originary misconception that inaugurated its departure from legitimacy. Rather, it is structural, so to speak, an indissociable aspect of its existence. The task of the critic is not, then, to look for what (originally) went wrong, but to describe the institution of a specific connection between a given element of knowledge and a given mechanism of power, and to disclose the conditions that allowed this connection to be accepted.

These remarks provide an idea of the issues taken up in this thesis. Formally, it begins with an account of the logic of instrumental reason as it plays out in the dialectic of myth and enlightenment elaborated by Adorno and Horkheimer. They show that the origin and engine of that dialectic are the fear and will to power of the human species, involuntary emotional responses that are provoked by humanity's original experience of nature. In positioning these pre-rational responses at the origin of the dialectic, Adorno and Horkheimer argue that instrumental rationality is haunted by a certain irrationality, namely, a fearful need to exert power over a nature which is conceived of in antagonistic terms. This origin also explains why humanity's efforts to empower itself by the advance of thought have not liberated it from fear: however much it advances, however great its

mastery of nature, rationality remains but an expression of the primordial fear that drives it. More concretely, however, the enlightened program of increasing human mastery of nature involves the frightening repression of humanity's own nature with its sublimation into a transcendental subject of knowledge. Thus, for Adorno and Horkheimer, has progress in the mastery of nature been inseparable from social regression: humanity's misdirected efforts to usher in a new state of affairs imprison it within the same old scenario; its efforts to distance itself from myth lead it to become all the more mythical.

But if their analysis of the dialectic of enlightenment provides a brilliant explanation for the strange situation whereby the advance of reason does not free humanity so much as increase its domination, one might question its dependence upon an apocryphal tale of origins. My second chapter takes this question as its point of departure, and begins by establishing the commonality of Foucault's concerns with those of the Frankfurt School, before describing and elucidating the stakes of his entirely different methodology. These are elaborated in a reading of Foucault's seminal essay on Nietzschean genealogy, which demonstrates that a genealogical approach to the history of rationality attempts to make history "effective" by avoiding "traditional" history's pursuit of and reliance upon an origin. Whereas the latter tends ultimately to reinforce or reify the present by constructing it as the necessary development of its origin – as the realization of its truth, and as the satisfaction of its purpose – genealogy permits "a dissociation" of the present by revealing its contingency. The present is not a necessary consequence but a chance result, the singular effect of a multiplicity of determining factors.

With respect to the history of rationality, genealogy shows that the emergence of the presently hegemonic concept of reason was neither necessary nor inevitable, and still less were its essential contours established in the pre-history of the human species. The project of genealogy is to reveal the shifts and displacements undergone by the concept of reason, and to identify the force that was required to effect them. By doing so, genealogical thought aims to show that the history of rationality cannot be said to take the form of a development, let alone a necessary one. In other words, it seeks to demonstrate that moments in the history of rationality do not correspond to successive appearances of the same meaning. Genealogical thought thus bears witness to the vicissitudes undergone by rationality as new meanings are attached to it, as old meanings are excised from it, and as it is compelled to engage in different roles.

This chapter pursues similar conclusions with respect to the history of rationality's entanglement with power. Because the history of rationality is not the linear development, from birth to adulthood, of a single or self-identical entity, it cannot be said to manifest progress or regression. This is even more so the case when one discovers the lack of a timeless standard by which to assess the progress or regression of rationality. For the concepts that such assessments would seem to require – "truth" or "legitimacy," for example – are as fluid as the object they purport to describe; indeed, changes in rationality provoke, or at least, are often accompanied by, new concepts of truth or legitimacy. In other words, rationality neither approaches nor departs from an unchanging standard that remains apart from it. Its transformations have to be grasped in the complexity of their relation to shifting concepts of truth and legitimacy, to concepts whose meanings shift along with its own. And finally, a genealogical analysis of

rationality precludes any judgments of progress or regression by disclosing the intrinsic and necessary relation of power and knowledge, which is to say that an implication in power relations is not something that knowledge falls into when it goes astray but rather a necessary condition of its existence. At the same time, if this inseparability of knowledge and power implies a certain trans-historicity, the latter should by no means be taken to imply something static and unchanging. The connection between rationality and power is always specific to a given moment and domain; it undergoes constant change. As rationality is transformed, it may be linked to new mechanisms of coercion; others may pass into illegitimacy, and be abandoned. Genealogy patiently and meticulously documents these shifts and transformations without reference to a notion of their essence, or of their essentially identical meaning. For any such reference would reduce the singularity of a particular configuration of power/knowledge to nothing more than another example of our eternal fate, the fate to which we were consigned by an origin. Insofar as genealogy avoids this reference, and exposes the contingency of a particular instance of power/knowledge (and more specifically, its contingency upon force, that is, upon concerted efforts to effect change), it acquires an eminently critical value; it allows us to take responsibility for our 'fate,' and places our destiny back in our own hands.

The two remaining chapters of the thesis comprise 'case studies' in these issues. Each attempts to illustrate the productivity of a genealogical analysis of rationality with respect to a pivotal event in its history: the institution of modern science by Francis Bacon, who sought solid foundations for scientific knowledge in a newly rigorous methodology; and, in the second, René Descartes' articulation of the "cogito," which redefined subjectivity as inherently and essentially rational, and thereby empowered (or

obliged) it to serve as the foundation of knowledge. To be sure, these events, and the figures with whom they are associated, play an important role in Adorno and Horkheimer's own discourse – but it is largely the role of an exemplar: Bacon and Descartes are represented as moments of a development that began long before they came on the scene, and which continues long after their deaths. In contrast to Adorno and Horkheimer's reading, these chapters emphasize the singularity of Bacon and Descartes' work. They demonstrate the break that Bacon and Descartes instituted with respect to their predecessors, and identify the force that the institution of those breaks required. Of central importance in this regard is an attention to the *ascetic* dimension of their work, which reveals that 'rationality' required a series of practical exercises that would transform the would-be scientist or philosopher, and constitute them in a new mode of having the capacity for true knowledge. In other words, Bacon and Descartes' respective redefinitions of rationality lead to entirely new modes of being of subjects, and thus to entirely new experiences of the world, modes of being and experiences whose continuity with those that preceded them cannot be asserted without considerable distortion. Thus, this attention to the *ascetic* dimension of their work leads to a further insight: if indeed there exists a logic that implicates determinate forms of rationality in the constitution of particular kinds of subjects, then by no means can that logic be said to realize itself in the form of a single development. Rather than the development of one rationality and one mode of subjectivity, history bears witness to an endless proliferation of rationalities and subjectivities. Moreover, these cannot be presumed to distort or conceal some fundamental identity or essential nature. What we are and have been is ever a product of the practices through which we constitute ourselves as knowing subjects and attain a

certain mode of being, a certain experience of ourselves and of the world. Better, then, to describe the emergence of these enabling yet constraining practices, and to analyze the force that sometimes radically transforms them and opens new possibilities, than to lament the loss of a state that never was. Better, in other words, to write their genealogy.

Chapter 1:

The Origin and Development of The Dialectic of Enlightenment

This chapter provides an account of Adorno and Horkheimer's approach to the history of rationality and its entanglement with power. It shows that the unified and all-encompassing nature of their approach derives from their postulation of and reliance upon an apocryphal tale of origins. This tale relates of the moment that the human species first became aware of itself and its difference from nature, a moment of fear in the face of that which was other and unknown. This originary moment orients the entirety of their analysis, which then unfolds the consequences of that encounter in a myriad of different domains. The history of reason is therefore told as the history of a single dialectical development, in which any particular moment exhibits the logic of the whole. In addition, the specific modes by which rationality creates objects and subjects of knowledge at any historical moment are only considered as so many exemplars of the overarching problematic, that being the development of instrumental rationality.

In their groundbreaking analysis of the *Dialectic of Enlightenment*, Adorno and Horkheimer disclose a hidden logic to the operation of enlightened reason. They fasten upon the enlightened desire for progress and social improvement, and suggest that it would be more accurate to understand this desire as the symptom of a kind of will to power on the part of humanity. The authors locate the roots of this will in an originary encounter with nature at the earliest moment in the pre-history of the human species.

Because this originary moment defined the course of the history to which it gave rise, we must consider it closely.

Essential to Adorno and Horkheimer's account of the originary encounter between humanity and nature was its provocation of an involuntary *emotional* response in humanity: fear and awe in the face of its newly perceived 'other.' We should not take this to imply the prior existence of two separate entities, humanity and nature, who bumped into each other one fine day in pre-history. The situation is more complicated, as it describes the very origin of those two entities in an experience that initiated their division and separation. This experience was primarily an emotional and instinctual one: the fear and awe of natural phenomena forcibly differentiated humanity from the external world of nature by imparting a first, primitive form, if not quite of self-consciousness, then at least of self-awareness. In a sense, then, the 'encounter' produced its antagonists; it did so by constituting them as antagonists. But humanity's sense of identity was fragile, a reflex of the fear provoked by its encounter with nature. To reinforce its sense of identity, humanity sought to reduce its fear of nature. It was out of this situation that conceptual thought was born, as a tool with which humanity could formulate explanations for natural phenomena and so reduce their terrifying inexplicability.

Before proceeding, we should note that this account already attributes a certain ambivalence to rationality. On the one hand, its connection to humanity's original emotional needs invested it with a utopian function. From its very 'inception,' thought was bound up with humanity's hopes and desires to be liberated from fear. The establishment of this connection would have a critical function in Adorno and Horkheimer's own discourse: it became possible to assess the degree to which rationality

had fulfilled these hopes. But at the same time, and on the other hand, rationality is already conceived of in terms of its instrumentality: it emerges as a tool with which humanity sought to protect itself from a nature that is felt to be other. Conceived of and used according to this instrumental paradigm, rationality would never address or heal the rift between humanity and nature; it would only aggravate and widen it. This helped to explain what Adorno and Horkheimer regarded as an essential characteristic of modernization in the West: its association of rationality with the subjugation and suppression of all forms of nature in the name of human power.

The better to see this play out, let us consider the earliest forms taken by humanity's explanations for natural phenomena: myths. Myths not only "sought to report, to name, to tell of origins – but ... also to narrate, record, [and] explain" (Adorno and Horkheimer, 5) the natural phenomena that so frightened humanity by describing them as the manifestations of supernatural powers: demons, spirits, and later, gods. These explanations reduced the radical alterity of nature to more manageable dimensions by rendering its inscrutable and implacable activity intelligible and explicable in human terms. Thus did a recognizably human space begin to open within what, previously, had been merely undifferentiated. This process should now be understood as having two equally important moments. Its first would be the relatively obvious way in which a nascent humanity, with the use of its reason, had begun to humanize its environment; its second and less immediately obvious moment would be precisely the converse, which is to say that it was only with this humanization of its environment that something like humanity became recognizable as such. To put this slightly differently, one could say that the first moment describes the production of objects of knowledge, while the second

describes the production of knowing subjects. Thus did rationality merely continue the process initiated by humanity's earliest emotional responses to nature, namely, their separation and constitution in an antagonistic relation. It further divided what had originally been a rich and undifferentiated plenitude of being into knowing subjects and objects known. This set humanity, as the "sole rational creature on earth"[1] over against the world of external nature. Moreover, because the engines that drove this faculty into operation (and perhaps even into existence) were fear and a resulting will to power, this split was not a neutral one: a hierarchy of value and a system of power relations was set up between those newly created subjects and the objects of their knowledge. The faculty of reason placed the subject that it created in a position of conceptual dominance and practical mastery over its objects. The "awakening of the subject" itself, Adorno and Horkheimer suggest, was "bought with the recognition of [and here, it would perhaps be more accurate to say "institution of"] power as the principle of all relationships" (*ibid.* 5).

As we shall see in subsequent chapters, the typical conceptualization of the relation between knowledge and power in the history of Western thought had established a fairly positive link between them. That is to say that the advance of rationality was held to lead fairly directly to the empowerment of humanity: power *accrued* to the knowing subject; it was concrete, and could be possessed or increased like a kind of wealth.[2] It

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[1] Kant, Immanuel. "Idea for a Universal History with a Cosmopolitan Intent." *Perpetual Peace and Other Essays.* Trans. Ted Humphrey. Indianapolis, IN: Hackett, 1983. P. 30.

[2] For more on this "economic" conception of power, see Michel Foucault's *Society Must be Defended* (Eds. Mauro Bertani & Alessandro Fontana. English series Ed. Arnold Davidson. Trans. David Macey. NY: Picador, 2003), where he suggests that juridical and liberal conceptions of power regard it "as a right which can be possessed in the way one possesses a commodity, and which can therefore be transferred or alienated, either completely or partly, through a juridical act or an act that founds a right... Power is the concrete power that any individual can hold, and which he can surrender, either as a whole or in part, so as to constitute a power or political sovereignty... There is therefore an obvious analogy, and it runs through all these theories, between power and commodities, between power and wealth" (13). Of course, Foucault goes on to question the relevance and validity of these conceptions, asking whether power is really (or whether it should be) modeled on the commodity: "Is power something that can be possessed and acquired,

was directed outwardly from the subject who possessed it, allowing the subject to gain control over its environment and live more comfortably, or increasing its autonomy and enabling it to live more freely. For Adorno and Horkheimer, however, these sanguine assumptions need to be carefully reconsidered in light of the fact that power is not so much in the hands or control of the subject as it is that which *produces* the subject. It was the involuntarily provoked will to power of a fearful species that prompted the exercise of its faculty of reason, and brought about its constitution as a subject of knowledge. To be a subject, then, was to always already occupy a position within a network of power relations - which was not quite the same as having power at one's disposal. It was to have available a specific and limited range of possibilities for relating to oneself, to others, and to the external world of nature, a range whose parameters were set by the base interests of self-preservation and which were defined in terms of power.

In order to better understand the character of this process, let us consider more closely the explanations proffered by myth. First of all, it is important to note that insofar as myth explains natural phenomena, the latter are now doubled into their "appearance and essence, effect and [motive] force" (Adorno and Horkheimer, 10). Things are no longer simply what they are, but rather become evidence of something else. Whether a location of *mana* or a manifestation of the gods' displeasure, things now represent something "which is more than their immediately perceived existence" (*ibid.* 10). At stake in this bifurcation is the founding gesture of abstraction or conceptual thought, for in it, as Horkheimer and Adorno acknowledge, "concept and thing became separate" (*ibid.* 11). As such, rationality, here, has already begun to accomplish the work of

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that can be surrendered through a contract or by force, that can be alienated or recuperated, that circulates and fertilizes one region but avoids others?" (14).

dividing being into subject and object, into "*logos* ... and the mass of things and creatures in the external world" (*ibid.* 5). This division of being would seem to imply the exercise of a certain force or even violence (with rationality, then, being the instrument of that force), but more importantly, for Adorno and Horkheimer, this division sets up a hierarchy between subject and object. Now, things only become what they are in their essence by way of a detour through the conceptualizing work of the subject. That is to say, the contribution of the conceptualizing subject is now to comprise the essential aspect of the thing – what the thing is in its 'truth.' For it is only with its conceptualization, only with the constitution of its truth, that the thing may be understood, influenced or manipulated; and only thus that it has a life-preserving, as opposed to life-endangering, function. And it is precisely insofar as the knowledge-producing activity of the subject endows the thing with this life-preserving function that the subject's contribution is so important – indeed, important enough to comprise the essential aspect of the thing. In this context, we might recall that the term "essential" need not refer only to the intrinsic nature of a thing, to that which determines its character, but also to that which is indispensable. That which was essential to the thing (in the first sense) was that which was most essential for human survival in a cold and impervious world.[3] The claim implicit within this argument is that the epistemological dimension of conceptualization cannot be thought apart from its instrumental dimension. From the very dawn of human thought, Adorno and Horkheimer suggest, these two

[3] In this, of course, Adorno and Horkheimer are inspired by Nietzsche's claim that "behind all logic and its seeming sovereignty of movement, too, there stand valuations or, more clearly, physiological demands for the preservation of a certain type of life." Nietzsche, Friedrich. *Beyond Good and Evil.* Trans. Walter Kaufmann. NY: Vintage Books, 1989. P. 11.

dimensions have been inextricably bound up with each other. The very idea of the essence or 'truth' of things arises as a result of the functions it can perform.

But if this activity of the subject provides it with a new sense of security, insofar as it now understands (in however primitive a way) the reason for natural phenomena, then this new security is purchased at the price of relating to those phenomena not as they are in themselves, but only as humanity has required them to be in order to feel at home within an unfamiliar and terrifying environment. Their conceptualization by humanity represents their transformation: "each thing is what it is [in its 'truth'] only by becoming what it is not" (*ibid.* 11). One effect of this transformation is the hypostatization and widening of the gulf that was initially thrust between nature and humanity by the latter's fear and awe at the originary moment of its first self-consciousness in the face of an other. For we now see that the rationality with which humanity attempted to reduce its fear has produced concepts by abstracting *away* from the things themselves – and it is within this conceptually constructed world that humanity feels comfortable and prefers to live. Within it, natural phenomena are understood; they have reasons and causes; they may be influenced by magical rituals or manipulated by science. But as Adorno and Horkheimer point out, the increased power and security that this conceptuality grants is paid for "with estrangement from that over which it is exerted" (*ibid.* 6). Thought never really apprehends its objects as they are, but only as mediated and distorted by its base interests. Indeed, things are known only to the extent that they can be manipulated (*ibid.* 6). This implies a second, although related point. The conversion of nature into an object of knowledge displays a built-in tendency to diminish the importance of the individual qualities that diverse phenomena might have possessed, and which would have

served to differentiate those phenomena from each other. Insofar as all conceptualized objects are thought in order to reassure humanity of its security, they have something in common, a shared essence which the authors describe as "a substrate of domination" (*ibid.* 6). All objects of knowledge are alike in having been conceptualized in order to serve humanity's interests in self-preservation. In serving these interests, this shared identity is valued more highly than any differences which stem from the individuality and particularity of natural phenomena. It is thus, the authors suggest, that rationality tends to transform nature into a homogeneous objectivity, "the chaotic stuff of mere classification" (*ibid.* 6).

If the effects produced by rationality were limited to the side of the object, they would perhaps not be so worrying – at least, not for the narcissistic and anthropocentric beings which Adorno and Horkheimer imply that humanity has been. But even the most self-centered human might be given reason to pause on its mission of knowing everything upon hearing that its own subjectivity is a function of the same rationality, and that the transformation forced upon nature as it is converted into an object of knowledge therefore has a human correlate that manifests itself when humanity is transformed into a knowing subject. Although the operation of rationality first grants humanity and nature their respective identities with their distinctive forms and capacities, this operation is as constraining as it is enabling. For, in being constituted in specific ways, as specific things, other ways of being are foreclosed. More specifically, just as nature is rendered increasingly abstract by the operation of rationality, so too is human identity. As nature becomes a homogeneous material for use, so does the "all-powerful self" that uses this nature become "a mere having, an abstract identity" (*ibid.* 6). Nature becomes the

irrational content that must be known by humanity; humanity becomes the source of all intelligibility, "the reference point of reason [and] the legislating authority of action" (*ibid.* 22). But as Kant's account of the birth and development of a cultural sphere made clear, this transformation also involves the devaluation and repression of humanity's own nature. Kant valued this sphere so highly for precisely the way in which it brought humanity to "discipline itself," that is, to curb (or repress) its natural instincts and sensuous inclinations so that these "selfish animal propensities" did not tear apart its newly formed society (Kant, "Idea," *PPOE* 33). This none-too-subtle denigration of humanity's natural being as "animal," as somehow less than fully human, provides a paradigmatic statement of the logic that Adorno and Horkheimer suggest was implicit within rationality's operation from the beginning. This logic was one that constituted human identity as something other than the nature which provoked its fear and its fearful reactions, an identity which could withstand the threats posed by nature and not "be lost in identification with the other" (Adorno and Horkheimer, 6). This identity, of course, was that of a knowing subject, the subject whose knowledge reduced its fear and provided it with a measure of control over its environment. Unfortunately, however, the very process through which this identity was constituted had the paradoxical effect of constituting it as an increasingly empty form of selfhood. In being identified as that which performed the function of conferring meaning upon nature, it was defined as something essentially different from nature (*ibid.* 7). In fact, it was defined as nothing more than its intellectual function; it was emptied of content. All such content would be shifted over to the side of nature or objectivity, to that which the knowing subject was not, while the subject itself would be sublimated into (nothing more than) the source of

nature's rational significance, the "transcendental or logical subject" whose own "natural traces" had been "methodically extirpated" (*ibid.* 22). As Adorno and Horkheimer's terms indicate, this transformation is a kind of self-mutilation on the part of humanity. Moreover, these terms also suggest a profound relation between a violence which was interior to the self, and a violence which would take place outside it: the violence, in other words, of those other "methodical extirpations" familiar to the 20th century and known to it by such proper names as Auschwitz and Hiroshima. But in order to understand how these two kinds (or, perhaps better, two levels or modes) of violence are linked, we must trace this logic out a little further. For the process we have just outlined – that of conferring meaning upon nature – is, in fact, only the more 'positive' side of the processes through which the rational subject is constituted as secure but empty.

In other words, the methodical extirpation of nature from the subject is also the result of rather more 'negative' processes whose aim, despite the *via negativa* through which they were to be reached, was the same as that of the positive processes just described: to constitute humanity as a subject of knowledge whose meaning-making and knowledge-producing activities allowed it a new control over its environment, granted it a more secure sense of its own identity, rendered it independent of natural contingency and, by way of all these, relieved it of its fear. Insofar as they shared these goals with the positive processes, it seems likely that the negative processes were originally invoked to work in conjunction with them and help them to realize these goals all the more effectively and efficiently. They were to do so by introducing a self-reflective moment into thought, whose operation would allow thought to assess and critique its own performance, which is to say, more specifically, how successful the positive processes

were in accomplishing the goals of empowering humanity and liberating it from fear. But just as it did when directed outwards, at nature, this inwardly-directed operation of rationality has the effect of dividing a previously undifferentiated whole into separate parts. Here, thought as a whole is divided into that part of itself which is actively self-reflecting, and that part of itself which is being reflected upon – into the subject and object of self-reflection, if you will. And just as the subject that was constituted by rationality's earlier division of being into subject and object came, for its practical value, to be the privileged term of that dichotomy, similarly does the subject of self-reflection come to be the privileged term of this dichotomy. For it is this self-reflective and critical mode of thought which identifies the deficiencies and shortcomings of thought's positive meaning-producing activity, and thereby allows it to purify itself of the regressive tendencies that maintain humanity in a state of fearful bondage to nature. In performing this function, however, the internal differentiation of thought into a subject and object of self-reflection is reified into a distinction between two, henceforth radically disparate, modes of thought. Of these, only one is conceived of as genuinely progressive, as leading to a truly secure identity: thought in its negative activity of self-reflection and critique. Thought in its more positive activity of constituting meaning is shown by its critical other to have an overly ingenuous faith in the emancipatory potential of its own meaning-making practices, which are ceaselessly accused of producing mystifying and anthropomorphic representations of how things happen rather than knowledge. Although the bifurcation which explanatory mythical narratives introduced into being was, from the perspective adopted earlier, a radical innovation that suggested a line of continuity between myth and later conceptual thought, from the perspective of more enlightened

thought this bifurcation was rudimentary and insufficient: the subject constituted through the operation of mythical rationality was not yet fully in possession of itself, inadequately differentiated from and poorly inoculated against the dangers of the nature which it would know as its object.[4]

For Adorno and Horkheimer, all of the operations undertaken by enlightenment thought can be understood in terms of their attempt to address and rectify the anthropomorphism of mythical rationality. Myth's explanation of natural phenomena as the manifestation of supernatural powers, for instance, is criticized for being nothing more than the projection of human fear (a "subjective property") outwards onto nature (*ibid.* 4). Two points are at stake in this criticism. First, that myth's lack of objectivity – the subjectivism of its 'knowledge' – handicaps humanity's power over nature through leaving (or wedging) a gap between concept and thing. Mythical rationality's lack of adequacy to nature renders it inadequate to the task of mastering nature. The quintessential expression of the enlightenment position on this issue is provided by Bacon, for whom knowledge was deserving of the name only when it was "a double of that which is."[5] And only insofar as knowledge "doubled" nature in this way would it

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[4] Before we consider these charges in more detail, let us note that a subject which is constituted and defined by the negative intellectual operation of self-reflection and critique is as empty as a subject which is constituted and defined by the positive function of conferring meaning upon nature – indeed, perhaps even more so. For this enlightened and critical mode of subjectivity would appear to be implicated in, if not responsible for, the emptying out of subjectivity in general by the fact of its calls for better (that is, more powerful and more useful) meaning-producing practices. The implementation of enlightenment's 'recommendations' might have led to an improved knowledge of nature and thereby increased humanity's power, but precisely in so doing they also furthered humanity's subjectivization in accordance with the logic we outlined above. And if, as we shall see in what follows, it was by way of the advances in rationality proposed and instantiated by enlightened rationality that humanity was increasingly constituted as "a mere reference point" in contradistinction to "the mass of things and creatures in the external world" (Adorno and Horkheimer, 5), it seems, then, that much of the responsibility for the increasing emptiness of the human subject should be laid at the feet of its negative intellectual operations.

[5] Bacon, Francis. "Of Tribute: The Praise of Knowledge." *The Major Works*. Oxford & NY: Oxford UP, 2002. P. 34.

increase human power: "nature [would be] conquered only by obedience."[6] To project upon nature one's own impressions of it, as myth did, was not to obediently reflect it, or at least, not to reflect it obediently enough. For this would leave thought at an impractical distance from nature and thereby render it ineffectual as a tool for the manipulation and control of nature. Objectivity in knowledge, on the other hand, promised to render thought more adequate to nature and thereby to the task of mastering nature – provided that objectivity is here understood precisely, and in its full technical sense, to imply an unconditioned relation to the knowing subject, and not merely a kind of accuracy. As we shall see momentarily, for enlightenment thought, even the most exact conceptual replication of a thing could be undone (that is, fail to sufficiently increase human power over nature) if it were found to be, however minimally, a projection of the subject. It was thus that enlightenment was motivated to embark on its mission of criticizing insufficient objectivity.

Addressing this lack of objectivity in knowledge in order to increase human power would already seem to imply the necessity of detaching knowledge from merely subjective experience. But the practical benefits of doing so would not only manifest themselves in an external way, as an increased ability to manipulate nature. It also seemed to promise a more secure sense of human identity, one insulated (and in that sense 'detached') from its physical experience of nature as an embodied being. Precisely this detachment is missing from myth, whose desperate projection of subjective qualities onto nature is construed by enlightenment thought as proof of nature's "immediate

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[6] Bacon, Francis. *The New Organon*. Eds. Lisa Jardine & Michael Silverthorne. Cambridge: Cambridge UP, 2000. P. 24.

sensory impact upon the cognizing [human being],"[7] which is to say, more specifically, that it is construed as proof of humanity's vulnerability to external stimuli. The anthropomorphic projections of myth are not, in other words, seen as the products of autonomous activity by a secure and self-identical subject, but rather as mere instinctually produced reflexes, involuntary responses to the fear provoked by the experience of nature. As such, this kind of 'knowledge' betrays the fundamental insecurity of humanity's identity, which is felt to be under constant threat from without. By way of contrast with this heteronomous mode of rationality, the detached and clinically objective knowledge produced by enlightenment would seem to testify rather to the strength and autonomy of the knowing subject, which would appear to have successfully disengaged itself from and thereby immunized itself against the physically threatening and epistemologically distorting experience of nature.

But humanity's heteronomy to nature within mythic rationality is not only evidenced by the fact that nature, in a sense, commands humanity's conceptualizing action; it is also evidenced by the form that such conceptualization takes. The distressing permeability of the border between humanity and nature is detected within the very content of myth's concepts, which, in their likeness to their objects, register an illicit traffic between nature and humanity, a traffic that enlightenment defensively (or fearfully) perceives as nature's breach of what should rather have been an impregnable border between the two. For even though the explanations of myth, by way of the radically innovative bifurcation that they introduced into being, doubled natural phenomena into their (frightening and useless) appearance and (reassuring and useful)

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[7] Bernstein, J. M. *Adorno: Disenchantment and Ethics*. Cambridge & NY: Cambridge UP, 2001. P. 87.

essence and thereby marked the beginning of a humanization of the natural environment, the method by which they did so (or at least, the method of which they are accused of resorting to) was mimesis, an attempt to make itself like the feared object in order to influence it: "The magician imitates demons; to frighten or placate them he makes intimidating or appeasing gestures" (Adorno and Horkheimer, 6). But, as a strategy to reduce human fear through the formation of concepts and construction of knowledge that would grant humanity power over nature and secure its identity, mimesis is sadly lacking. Indeed, to enlightenment, this strategy not only fails to help, but aggravates the very situation it was invoked to resolve. Let us now see why.

First of all, to enlightenment, mimetic practices show that humanity is insufficiently detached from its experience of nature as an embodied being, that it remains vulnerable to external nature, that its identity remains insecure. For, in order to make itself like nature, the human being necessarily had to have had a bodily experience of nature. Such an experience is explicitly acknowledged in mimesis, whose concepts and practices, in comprising 'imitations' of nature, seemed almost proudly to display their sensory and perceptual beginnings in the fearful bodily experience of a human being. What this describes, of course, is anthropomorphism: the fact of being contingent upon and thoroughly conditioned by the experience of the perceiving human being. And, as we now know, in being anthropomorphic, mimesis would fail to constitute a secure human identity and inhibit the acquisition of power over nature.

But if the anthropomorphic projection of meaning onto nature implied an attitude of servility rather than mastery, and if this mode of relating to nature would seem to have placed certain limits, in advance or *de jure*, on humanity's power, then we must now note

the manner in which it also imposes more practical or *de facto* limits on power. For the attribution of powers or magical qualities to natural objects effectively enchanted them and thereby created a mystifying representation of how things took place. To put this in the terms with which we are now familiar, the conceptualized truth of the thing, as anthropomorphic and subjective, remained at a distance from the thing itself, which is to say that the mythic 'knowledge' of mimetic practices was not adequate to the nature it was supposed to know. The practices themselves, then, with which that nature was to be controlled – these had no real purchase upon it, and were therefore little more than empty motions whose control over nature was precluded by virtue of their disconnection from it.

A key sign of these errors, and of the heteronomy in which they maintained humanity, was the belief that the objects and phenomena of nature retained a host of differences, that they possessed their own individual identities. Such a belief was clearly a product of a mimetic mode of thinking, as it duplicated the apparently diverse range of nature's forms in the belief that they were meaningful and powerful, rather than seeing them as they were, as parts of a meaningless and homogeneous stuff that awaited the conceptual activity of the subject to endow it with significance. Even though the conceptual abstraction of such objects and phenomena into a "multiplicity of mythical figures" (*ibid.* 4), gods, or demons was a sophisticated advance in rationality, the specific representation implied by the magical rituals or names through which they were to be influenced[8] imputed far too much power to those objects, as if it were they, in themselves, that possessed the property and powers that would allow humanity to be at home in the world, and not the power of humanity's own conceptual activity that would

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[8] "The rites of the shaman were directed at the wind, the rain, the snake outside or the demon inside the sick person... What is done to the spear, the hair, the name of the enemy is also to befall his person" (Adorno and Horkheimer, 6).

subdue the fear-provoking unfamiliarity of its experience of nature. To enlightenment, such practices seemed to manifest an attitude of trust in the beneficence of nature, of hope that nature would deign to provide the recognition of a livable human world, rather than simply going about the practical business of producing the security that they desired.

Let us consider one final aspect of the enlightenment critique of myth's mimetic method. This consists of the scathing criticism that the mimetic strategy of repetition, far from allowing humanity to "identify itself with repeated existence and so *escape* its power" (*ibid.* 8), imprisons humanity *within* existence – an existence whose indefinite repetition endows it with the status of an unalterable fate. Nor should this fated-ness of human existence be understood as something that restricts itself to the interior of the mythic narratives and discourses that utilize mimesis as their method. The more powerful claim of the enlightenment critique is that such narratives and discourses institute such fate within the broader social world that is their context. For rather than enabling or initiating concrete changes to the conditions that provoke human terror, myth's mimesis of those conditions only re-presents or re-enacts them. And insofar as these representations and reenactments fail to increase human power over nature, they render the mythic conception of natural processes as eternal, "as recurring events within a cyclically structured natural world" (Bernstein, *Adorno* 90-1),[9] a self-fulfilling prophecy. This tendency towards the reproduction of a given and unsatisfactory state of relations (here, between humanity and nature, although we shall see shortly that this complex of relations involves more specifically social ones, too) should suggest the possibility of

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[9] For a relevant passage in Adorno and Horkheimer, see the following: "[Myths], like magic rites, refer to the repetitive cycle of nature. Nature as self-repetition is the core of the symbolic: an entity or a process which is conceived as eternal because it is reenacted again and again in the guise of the symbol. Inexhaustibility, endless renewal, and the permanence of what they signify are not only attributes of all symbols but their true content" (12).

understanding mimetic practices in terms of an ideological, as opposed to utopian, function. And it is not only their failure to increase human power over nature that makes them "effective in the realization and the maintenance of the existing order of things,"[10] as Mannheim would put it. This foreclosure of a new and improved world is made still more definite by virtue of their tendency towards mystification: in myth, the periodic difficulties and disasters that befell humanity are presented not as enlightened rationality saw them, as the results of human error, or as signs of myth's insufficient rationality, but falsely, as arising due to implacable forces beyond human control. If this presentation of the results of social and historical processes mystifies them by presenting them as natural and ahistorical, then we are not too far, here, from a kind of reification, with the supposed objectivity and independence of those forces' existence taking the rap, so to speak, for what were actually mythic rationality's own shortcomings.

But if the essentially reproductive orientation of "ideology" would seem to suggest its relevance to an analysis of myth's mimetic practices, or, more specifically, to an analysis of the manner in which these latter simply reflect "the essence of the existing order" and thereby confirm "the eternity of the actual" (Adorno and Horkheimer, 20), it is not the term that appears in the context of the discussion of myth's institution of fate. Instead, Adorno and Horkheimer discuss this process in terms of the principle that it establishes and by which it operates: immanence. Immanence describes the position of thought with respect to existence, as the mimetic methods of mythic rationality would suggest that it is at best coterminous with and at worst interior to the existence that it reproduces. The fact that myth purports to explain existence merely by re-presenting it

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[10] Mannheim, Karl. *Ideology and Utopia.* Trans. Louis Wirth & Edward Shils. NY & London: Harvest Books (Harcourt Inc.), 1936. P. 192.

renders myth's 'knowledge' profoundly tautological: in it, existence is pronounced as the very meaning of existence (*ibid.* 20). Such tautologies reflect myth's establishment of an unbroken circuit between thought and being, a circuit whose closure marks the inability of mythic rationality to lead outside or beyond (that is, to transcend) existence as it is currently experienced.

But rationality's reduplication of existence in thought is not the only reason for its inability to transcend it and thereby usher in something genuinely new. This inability also stems from myth's "explanation of every event as repetition" (*ibid.* 8) – more specifically, as the repetition of something already known. It was only insofar as natural processes or phenomena were already known (and, through the activity that 'knew' them, endowed with human significance) that their mimesis, their reproduction in thought or other practice, would have any validity at all. Only thus would events be familiar or reassuring; only thus could their mimesis promise to produce or give back an independent self.[11] For enlightenment, however, rather than being seen as a sign of progress, the mythic construal of events as the repetition of something already known and familiar is criticized for the manner in which it excludes the possibility of anything new; in myth, events appear rather "as something predetermined which therefore [are] really the old" (*ibid.* 21).

The paradox, of course – and it is upon this paradox that much of Horkheimer and Adorno's critique of enlightenment will hinge – is that the "new" of which enlightenment

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[11] The process of remaking oneself to be like nature (by mimesis) could only provide the recognition of a specifically human world, of a world amenable to human life, if the nature which one was making oneself like was already rich with human significance. Only thus, if that which one 'imitated' was already known and familiar, could the activity of imitating it be anything more than the dissolution of one's self. For if, as we suggested earlier, being known, or more precisely, being constituted as an object of knowledge, meant that nature had been transformed and humanized, then its imitation would actually be the imitation of something human, of something that had been produced by oneself. This activity could conceivably be held to give back a robust, independent self, rather than merely dissolving it in the servile and self-abasing activity of making oneself like a seemingly wholly alien nature.

speaks, the "new" for which, in ostensible contradistinction to myth, it prepares – this "new" has as little to do with the unknown or radically different, with that which would be unknown *because* of its radical difference, as the responses of myth did. Indeed, the experience of the altogether new, of that which was unknown or non-identical to anything in the experience of the subject, was an experience whose lack of "markers or signposts"[12] terrified humanity by providing it with no references that would stabilize or anchor its experience of the world. It was, after all, the intolerability of remaining within this "primal flux" (Jameson, 16) that drove humanity to formulate explanations for its experience in myths. These explanations reduced the alterity and the novelty of the previously non-identical by identifying it as an instance or repetition of that which was already known by the subject. To identify natural processes or phenomena in this way was to forge a series of "symbolic relations" (Adorno and Horkheimer, 21) between humanity's radically particular, indeed, unique experience of the present actuality of nature – an overwhelming experience of the continuously new, the unknown, and the different – and the stable concepts whose increasing generality would allow them to subsume more and more of the particular within themselves, and thereby provide some reassurance that things (not only the world of objects, but also, and perhaps more importantly, human identity) remained somehow the same through time. The point to be taken from this is that enlightenment's calls for "the new," the flipside of its criticisms of myth's imprisonment of humanity in the old, are not to be understood as expressions of a wish to return to an experience of unmediated novelty. Indeed, the new state of affairs that it imagines and longs for is precisely the end of that terrifying, intolerable experience

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[12] Jameson, Fredric. *Late Marxism. Adorno, or, The Persistence of the Dialectic.* London & NY: Verso Books, 1990. P. 16.

of novelty, of pure difference, of the non-identical, and its replacement with the order and stability of a regime of sameness. Myth is criticized for its failure to produce this new regime by sanitizing human experience of novelty and difference – not for its elimination of novelty and difference. Enlightenment's invocations of "the new" need to be understood in this light: as calls for *more* of the *same* – of that which would not change (or recurred), and that which was not other. In this, of course, it is at one with myth, and represents only the radicalization of the latter – something which would seem to have been missed in enlightenment's rather allergic efforts to differentiate and distance itself from myth's ostensible anachronism. This blindness to what it shares with its alleged antagonist also implies that enlightenment's efforts to carry out its program, even if it conceives of that program as the eradication of myth, will result in it becoming all the more mythical. It is only when we grasp this that we will begin to understand the two theses that sum up Horkheimer and Adorno's argument: "myth is already enlightenment, and enlightenment reverts to mythology" (xviii). Let us now examine the unfolding of this entanglement by tracing out the evolution undergone by rationality as enlightenment addresses the shortcomings of myth.

Horkheimer and Adorno find one of the crucial and illustrative moments of this evolution to be the shift from the mimetic mode of thought underlying magical rituals to that which underlay the practice of sacrifice. Although sacrifice, to our 'civilized' eyes, might appear to be "bloody untruth," its emergence marks an essential step towards the sophistication of a "discursive logic" (*ibid.* 6) that would address and resolve the problems inherent in mythical rationality. This logic – in essence, a logic of substitutability – would replace the specific representation implied by mimetic methods

of knowledge- or concept-production, whose maintenance of an essential link between concept and thing[13] meant that natural objects retained "the sanctity of the *hic et nunc*," a certain "uniqueness" that "[distinguished them] radically, [and made them] non-exchangeable" (*ibid.* 6-7). This sanctity was abolished once humanity discovered that objects shared certain useful characteristics, for such common traits meant that one object could stand in for another: "Even though the hind which was offered up [substituted] for the daughter, the lamb [that was exchanged] for the firstborn, necessarily still had qualities of its own, it already represented the genus. It manifested the arbitrariness of the [scientific] specimen" (*ibid.* 6). Such practices therefore represent a radical revaluation of nature and its relationship to humanity. Objects are no longer valued for what they are "in themselves"; no longer do they have the sanctity of the unique individual. They are instead valued for what they represent, which is to say, for the characteristics that they are discovered to share with other objects and which allow them to be interchanged. It is this useful commonality that comes to define the importance of natural objects for humanity, and in terms of this that humanity now views, or rather, conceptualizes them.

This development represents a kind of 'liberation' of the concept. No longer is it moored to a particular object by mimesis; no longer is its content determined by the latter's form. If the same concept can embrace both hind and daughter, lamb and firstborn, it has been raised to a higher level of generality or abstraction that renders it at once more flexible and more capacious. Not only does this vastly increase the descriptive or explanatory power of a concept, making it applicable to many more objects

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[13] "At the magical stage dream and image were not regarded as mere signs of things but were linked to them by resemblance or name. The relationship was not one of intention but of kinship" (*ibid.* 7).

than had been allowed by the strict restrictions imposed by mimesis, but precisely in so doing it also helps to further sanitize experience of those qualities that had so terrified humanity: absolute particularity and radical difference. For whatever concept it is that allows hind to be exchanged for daughter in the sacrificial rite – "alive," for example, or perhaps "of value" – the fact that it applies equally to a number of diverse particulars demonstrates that it is capable of organizing, or rather, has already started to organize raw human experience "into so many abstract grids" (Jameson, 20). These grids categorize and classify events and phenomena, and in so doing allow the human experience of those events and phenomena to be the comfortable one of recognizing their familiarity rather than the overwhelming one of being confounded by their novelty and difference. The advance made by rationality when it exchanges one object for another in sacrifice is therefore much more profound than that simply of saving countless daughters from the altar. The concepts of "life" and "value" which enabled the exchange in that limited context are applicable outside it, where they comprise an invaluable tool for rendering the strange, the different, the apparently unique, rather less so: for all the differences between this hind and that hind, or this hind and that daughter; for all the appearance of their unique individuality, they already have a minimal familiarity in being recognizable as alive, as participants in this category that humanity already knows.

Thus might we understand this shift from mimetic to discursive rationality as beginning to fulfill the enlightened requirement of a greater objectivity (and therefore also detachment) in knowledge, through which objects would be disenchanted from the mystifying representations forced upon them by myth. The concepts proper to each object were no longer dependent on or conditioned by the experience of a particular

subject who perceived that object, and therefore had less opportunity to be distorted by the affects and feelings of the perceiving subject. The greater accuracy of this detached knowledge seemed to be demonstrated by the increased power over the object that it enabled, for as we just saw, a concept no longer tied exclusively to a single object by the perception and mimesis of that object could greatly increase the latter's manipulability by allowing it to be exchanged with another. But we should also recall, similarly, that the 'detachment' of this knowledge implied a more secure sense of human identity that was insulated from its physical experience of nature as an embodied being. The raw and relatively unmediated experience of nature that mimesis seemed to suggest had been toned down or filtered out by the increasingly abstract concepts through which and according to which humanity came to understand its own experience.

If these already quite substantial rewards had been produced merely by the isolation of a characteristic common to two objects, then it seemed clear that a continuation of this process of abstracting away from the natural world would yield even greater benefits. To be sure, the issue was probably never articulated quite like this by those involved in and responsible for this development – but Horkheimer and Adorno suggest that it is probably the most fitting framework to understand the 'advance' of rationality in modernity. For its description of an ever-increasing abstraction, or "cognitive ascent," as Bernstein suggestively puts it, which lifts rationality "from concrete to abstract, [or] from particular to universal" (Bernstein, *Adorno* 88) encompasses a wide range of diverse historical developments. Indeed, it is within precisely this frame that Horkheimer and Adorno would have us understand the drive to formulate all-encompassing systems of knowledge which would be at once unified and

universal. From Bacon's *scientia universalis* to Leibniz's *mathesis*, from Hegel's absolute knowledge to the encyclopedia of Diderot and D'Alembert, "only what can be encompassed by unity has the status of an existent or an event; [enlightenment's] ideal is the system from which everything and anything follows" (Adorno and Horkheimer, 4). Such systems would be able to subsume not just this or that object, as a single concept like "life" or "value" could, but the totality of experience, or existence itself: "nothing is allowed to remain outside" (*ibid.* 11). Within such systems, the individuality (and therefore, the disruptive potential) of things is radically curtailed; such individuality as there is will be reduced to mere "position and arrangement" within the all-encompassing knowledge of the subject (*ibid.* 4). Nor would the "something else" that objects represented any longer be their own; meaningless objects would instead represent nothing more than the meaning-producing activity of the subject. That is to say, in these kinds of systems, objects will come to be treated merely as exemplars of the stable conceptual properties that they share with other objects; merely as instances of what is already known. By doing so, these systems will therefore have completed a radical reversal of the epistemological relationship of dependency on nature that mythical thought had been presumed to exhibit in favor of a relationship of priority over that nature – indeed, of dominance or domination over nature.

It should be fairly obvious from this description that the drive to develop increasingly systematic abstract knowledge contributes to the process that was described some time ago as one that effectively homogenized the natural world. For with this "cognitive ascent," the objects composing that natural world undergo a transformation from things each possessing their own unique qualities and linked by a multiplicity of

affinities, into a homogeneous otherness or "mere objectivity" whose only relationship, thereafter, is to "the [godlike] subject who confers [their] meaning" (*ibid.* 6-7). The conceptualizing activity of the human subject has subsumed the individuality and difference of things within a general theory or concept that identifies them, and this not only in the sense of establishing or indicating what they are, but also in the more insidious sense of equating them. Although this 'identity logic' had been inaugurated by sacrifice, the latter appears almost innocent when compared with its totalizing (or totalitarian) progeny: the "universal fungibility" characteristic of science, wherein "differences are so fluid that everything is submerged in one and the same matter" (*ibid.* 7); the universal mediation by which capitalism puts a price on everything; or the systems of justice that see "guilt and atonement, happiness and misfortune ... as the two sides of an equation" (*ibid.* 12). Yet the emergence of these great systems would not have been possible without the prodigious expansion of a mode of thinking based on abstraction, which, by dissolving the uniqueness of things into a homogeneous objectivity that was dependent for any meaning on the conceptual activity of the subject, made possible the "[relation of] every existing thing to every other" (*ibid.* 8).

The paradoxical implication of this transformation of the natural world into a homogeneous objectivity is its generation of a new kind of ignorance concerning that world. For if the "cognitive ascent" of rationality offers humanity a blessed respite from the sensory impact of nature, it does so precisely by abstracting (or ascending) *away* from nature: any knowledge that might have really apprehended the object is now tabooed for being mimetic (*ibid.* 10). To the extent that mimetic operations are permissible at all, the discourse that they produce must be relegated to, and quarantined in, some other special

"knowledge-free zone of social activity" (*ibid.* 19) – typically, that of art. In being an image or likeness of nature, such discourse has "[renounced] the claim to know it" (*ibid.* 13). For enlightenment, truth is produced not by any mimetic operations that name or imitate the object, not least because they acknowledge (or betray) the priority of the object over the conceptual activity that knows it. Instead, truth is produced by the operations that classify and order the object according to rational categories that are themselves assumed to be prior to and independent of any particular experience of that object. Highly formalized disciplines, those whose content is purest, like logic, mathematics, or mathematical physics, thus come to fulfill a certain ideal of reason.[14] Not only because they are the most independent from nature, however, but also because their products, the concepts they produce, have the utility that comes of their incredibly wide applicability: ultimately, everything can be resolved into numbers, and, from there, calculated (Adorno and Horkheimer, 4). But among or at the head of these ideal forms of reason, one should also place the self-reflective and critical mode of thought described much earlier, that quintessentially enlightened operation that allowed thought to assess and critique its own performance. For this operation, too, is a formal as opposed to substantive one; an operation defined, in fact, by its opposition to substantive rationality, whose false objectivity must be denounced as mythology.

The problem, however, is that these technological 'resolutions' of the natural world into the abstract categories of a pure reason ("number" being the paradigmatic, even hyperbolic instance of such categories) know their objects only insofar as they fit within or are subsumed by those categories: anything incommensurable (or non-identical)

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[14] As J. M. Bernstein points out in another fine essay: "Negative Dialectic as Fate." *The Cambridge Companion to Adorno.* Ed. Tom Huhn. NY & Cambridge: Cambridge UP, 2004. P. 26.

is "amputated" (*ibid.* 9). As the secrets of nature are violently extracted from it in the scientific laboratory, and as it is found that nature conforms to calculable, predictable mechanical laws, the concrete, qualitative reality of nature – its mystery, its "sanctity" – is excised from it. The social, historical, and indeed, the real human meanings of things are wiped out as objects are reduced to the "abstract spatial-temporal relationships, by which they can be seized" (*ibid.* 20). It is thus that Horkheimer and Adorno suggest that "abstraction, the instrument of enlightenment, stands in the same relationship to its objects as fate, whose concept it eradicates: as liquidation" (*ibid.* 9). But we should probably be reminded that these processes have their subjective dimension too. If humanity's experience of nature is mediated by its knowledge of nature, or if, in other words, it experiences the nature that it knows, and only as it knows it, then an increasingly abstract knowledge of nature shall result in an increasingly abstract experience. The 'practical' consequence of this situation, if the paradox can be forgiven, is a kind of regimentation of experience as it is squeezed into the strict categories isolated by rationality. Only its "conceptually salient" aspects will be attended to: "elements of experience that do not 'fit' what we might conceptually require of them are systematically ignored, even 'suppressed.'"[15]

The increasing identification of this limited part or function of reason with or as the whole of it describes thought's transformation into nothing more than a kind of technology. Although the analysis conducted thus far has, of course, sought throughout to demonstrate the instrumentality of rationality – and this from its very 'inception,' if you will – a (quantitatively) new stage in reason's development is reached when its

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[15] Pippin, Robert B. "Adorno on the Falseness of Bourgeois Life." *The Persistence of Subjectivity.* NY: Cambridge UP, 2005. Pp. 102-3.

'creative powers,' its ability to postulate the existence of any rational objectivity at all ("of reason as a force not only in the individual mind but also in the objective world"[16]) are altogether disavowed. At this point, thought has transformed itself into pure, transparent method; it no longer aims to produce concepts or images, "nor the joy of understanding," but only power and domination, "exploitation of the labor of others, capital" (Adorno and Horkheimer, 2). This goal was already articulated by Bacon, for whom the proper care and concern of reason was not the generation of "nice, plausible opinions about things," nor academic debates and arguments, but rather the achievement of "sure, demonstrable knowledge" with which one could "conquer nature by action" ("Of Tribute," *MW* 30). As Horkheimer and Adorno's own citation of Bacon makes explicit, for this mode of thought, "knowledge that tendeth but to satisfaction, is but as a courtesan, which is for pleasure, and not for fruit or generation."[17] But precisely in so transforming itself, thought blinds itself to the goals that originally motivated its development: the utopian hope of liberation from fear. For such ideas were predicated on a belief in their objective goodness, a belief which is impossible to maintain in the face of enlightened rationality's denunciation of all such objectivity as false, which is to say as an anthropomorphic projection of the subject. With rationality's increasingly exclusive focus upon means, upon ever more economic, efficient, and effective methods of increasing human power, it loses all ability to conceive of or reflect upon the ends to which that power is put. Thus, even if this development marks a certain 'democratization' of knowledge, with "kings [controlling] technology no more directly than ... merchants," the consequences of its (alleged or real) value-neutrality are more

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[16] Horkheimer, Max. *Eclipse of Reason*. NY: Continuum, 1974 (2004). P. 4.

[17] Bacon, Francis. "Valerius Terminus: Of the Interpretation of Nature." *Miscellaneous Tracts upon Human Knowledge*, *Works*, Vol. I, P. 281. (Cited in Adorno and Horkheimer, 2.)

chillingly evoked by its ability to serve "the purposes of the bourgeois economy both in factories and on the battlefield" (Adorno and Horkheimer, 2). Because power, now the sole concern of reason, is radically independent of the values that might have guided its use, one end is much the same as any other. Ends are not any concern of reason. As Horkheimer notes, "the acceptability of ideals, the criteria for our actions and beliefs, [and] the leading principles of ethics and politics" are no longer matters of objective truth but only of subjective choice or predilection (Horkheimer, 6).

To make the paradoxical aspect of this development slightly more explicit, we should note that thought's new indifference to ends, its utter inability to distinguish between more or less desirable ends, simply hands it over to the interests that dominate or predominate in society, which is to say that it becomes a tool of social reproduction rather than the force for positive change which it had always aspired to be. Having renounced its capacity to assess and determine the ends of human action and social development, and having thereby adapted itself to reality as it is, thought no longer has any standpoint from which it can judge current existence; it has sacrificed its critical potential, and, with that, the ability to usher in the new and improved world that was its goal. This marks enlightenment's relapse into mythology, into precisely that which enlightenment accuses myth of being: a mode of thought which consigns humanity to its natural, because irrational (literally, no longer a matter of reason), fate. Indeed, reason's abandonment of its ability to guide humanity places humanity back under the sway precisely of natural forces, chief among them the mindless instinct for self-preservation: "nature as true self-preservation is thereby unleashed, in the individual as in the collective fate of crisis and war, by the process which promised to extirpate it" (Adorno and Horkheimer, 23).

However sublimated their modern forms, this resurgence of natural forces marks the clear failure of enlightenment to deliver the promised emancipation from and control over nature, which is to say that it too, just as myth did before it, simply perpetuates or reproduces the uncontrolled and unpredictable existence that it found intolerable.

In fact, that this enlightenment run rampant should be interpreted precisely as the modern myth *par excellence* is suggested not only by the way in which, as it blinds itself through transforming itself into pure technology, it gives itself over to unexamined presuppositions (that power is the only goal of knowledge, for instance) that allow it to be directed towards irrational ends, but also by the fact that when we examine the cause of the failures just described (the institution of its own variety of fate, its tendency towards reproduction), we find enlightened rationality to operate according to the very same principle of immanence as myth did. Just as myth reduced the non-identical, the new and unknown to an instance of that which was already known by the subject, imitating things in ritual precisely for that which those things represented,[18] so too does enlightenment, and for the same reason: to reduce the radical alterity of nature and thereby help to stabilize human experience. If enlightenment swaps the images and imitations produced by mimetic practices for the rational categories produced by abstraction, it only does so in order to accomplish these same goals all the more effectively. This development therefore does nothing to change the same fact for which enlightenment criticized myth: that its construal of natural processes and phenomena as an instance of what was already known and familiar tends to foreclose the possibility of there ever being anything new. Indeed, this foreclosure becomes all the more certain with the increasing rigor of abstract

[18] "Each ritual contains a representation of how things happen and of the specific process which is to be influenced by magic" (Adorno and Horkheimer, 5). See also note 12, above.

concepts, which subsume an ever-broader range of experience within themselves and thereby close the circuit of thought and being ever more tightly. This re-establishes myth's power of repetition over humanity, albeit in the guise of a new name, that of the regularity "objectified in the laws of the natural world" (*ibid.* 8), a regularity such that "the clarity of the scientific formula" can be seen as just another confirmation of "the eternity of the actual" (*ibid.* 20).

Chapter 2:

Genealogies of Reason
And the Critique of 'Origins'

This chapter establishes the commonality of Foucault's concerns with those of the Frankfurt School, before explaining his rejection of their methodology. It demonstrates that a genealogical approach to the history of rationality attempts to make history "effective" by avoiding "traditional" history's pursuit of and reliance upon an origin. Whereas the latter tends to reinforce or reify the present by constructing it as the necessary development of its origin, genealogy permits a "dissociation" of the present by revealing its contingency. Its genealogy shows that the present is not a necessary consequence but a chance result, the singular effect of a multiplicity of determining factors.

In 1978, Michel Foucault gave a talk entitled "What is Critique?" to the French Society of Philosophy, in which he allies his own "historical-philosophical" practice with the project of the Frankfurt School.[19] This alliance is grounded in a common interest in the ever-increasing rationalization of economic, political, and social life in the modern epoch, and in how that double-edged 'process' of rationalization has heightened our subjection to mechanisms of coercion as much as it has increased our productive capacities. In his talk, Foucault situates this common interest in the critical space established by Kant's reflections on enlightenment and critique, which linked humanity's "maturity," the ability

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[19] Foucault, Michel. "What is Critique?" *The Politics of Truth.* Ed. Sylvere Lotringer. NY: Semiotext(e), 1997. P. 44. Hereafter referred to parenthetically in the text as "Critique."

"to use [its] understanding without guidance from another,"[20] with an imperative "to know knowledge" ("Critique," *PT* 36). For Kant, if humanity was going to put its own reason to use, it was necessary to have a clear idea of what reason could and could not do; it was necessary to determine the limits of reason so that its use would remain legitimate. Without the critique that established those limits, it would be all too easy to slip back into one or another form of dogmatism, heteronomy, or illusion.[21] But if, in Foucault's account of Kant, critique was an indispensable prolegomenon to enlightenment, the two were not to be identified: enlightenment was not reducible to critique, or critique to enlightenment. If critique sought to determine the limits of reason, enlightenment was the process and project whereby humanity would 'grow up,' so to speak, and have the courage to put its own clearly defined reason to legitimate use. Enlightenment thus reflected a certain emancipatory movement "by which the subject gives himself the right to question truth on its effects of power and question power on its discourses of truth"; it involved a "desubjugation of the subject" ("Critique," *PT* 32), or, and this was the same thing, "a modification of the preexisting relation linking will, authority, and the use of reason" ("Enlightenment," *PT* 106). As Foucault put it elsewhere: "the critique is, in a sense, the handbook of reason that has grown up [i.e. 'matured'] in Enlightenment; and, conversely, the Enlightenment is the age of the critique" (*ibid.* 111).

On the basis of his isolation of these two interwoven yet distinctive concerns in Kant's work, Foucault proceeds to sketch the outlines of a genealogy. This genealogy

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[20] Kant, Immanuel. "An Answer to the Question: What is Enlightenment?" *Perpetual Peace and Other Essays.* Trans. Ted Humphrey. Indianapolis, IN: Hackett, 1983. P. 41.

[21] Foucault, Michel. "What is Enlightenment?" *The Politics of Truth.* Ed. Sylvere Lotringer. NY: Semiotext(e), 1997. P. 111. Hereafter referred to parenthetically in the text as "Enlightenment."

describes how the 19th and 20th centuries offered greater opportunities to pursue Kant's critical enterprise than they did his calls for enlightenment ("Critique," *PT* 36). The rise of a positivist science, the development of a State or state system "which justified itself as the reason and deep rationality of history," and the "stitching together" of those two trends into "a science of the State" created an environment, Foucault suggests, in which Kant's critical project could flourish while his calls for enlightenment went unanswered (*ibid.* 37). Enlightenment questions about how *not* to be governed did not accord very well with the exigencies of the conjuncture, which not only permitted but generated new forms of governmentalization as part of the rationalization of the economy and society. Critique, in contrast, was afforded much greater purchase, presumably because it helped buttress the science that "[played] an increasingly determinant role in the development of productive forces," the science whose "refined techniques" would increasingly become a channel through which "state-type powers" were exercised (*ibid.*). There was thus a neglect of the emancipatory dimension of Kant's project at the same time as his critical enterprise helped weave a "fabric of tight relationships" between science and the State (*ibid.*).

Foucault's account establishes the context in which suspicions could begin to be raised that the historical process of rationalization, and perhaps even reason itself, was implicated in or responsible for a number of "excesses of power" (*ibid.* 37-8). According to Foucault, these concerns were particularly acute among the German Left, whose institutional position and proximity to that other "critical movement of the art of not being governed," the Reformation, meant that the Enlightenment would be understood as a particularly important episode, "a sort of brilliant manifestation of the profound

destination of Western Reason" (*ibid.* 38-40). But the same concerns would also appear in France, later and in a different form, Foucault observes, where they were raised by phenomenological inquiries into the constitution of meaning and by historical inquiries into the historicity of the sciences (*ibid.* 41-2). Thus, even if the problem of understanding the relation between rationality and power was the same one faced by intellectuals in both Germany and France, the approaches to that problem and the forms of analysis it provoked were very different.

Foucault describes the prevalent (German) approach to this problem as one that investigated "the legitimacy of historical modes of knowing" (*ibid.* 48). This approach sought out the "historical destiny of knowledge at the time of the constitution of modern science," and looked for "what in this destiny already indicated the indefinite effects of power" (*ibid.*). Although Foucault extends this approach every courtesy, he proposes for himself a different procedure: the genealogical examination of what he calls "*eventualization*," the coming-to-be of an 'event,' which, in this context, is a specific nexus of power/knowledge and the series of relations that are structured around or by that nexus. In other words, Foucault seeks to delineate the concrete and empirical links that are established between elements of knowledge and relations of power at a given historical conjuncture. He executes this program by asking what forms these connections take and how they come to be instituted, such that "a given element of knowledge takes on the effects of power in a given system where it is allocated to a true, probable, uncertain or false element," and such that "a procedure of coercion [the manifestation of a power relationship] acquires the very form and justifications of a rational, calculated, technically efficient element" (*ibid.* 50). These investigations are clearly very different

from a practice that avails itself of norms and standards of legitimacy. Instead of presuming to measure a historical mode of knowing against some standard of legitimacy, Foucault elucidates precisely the conditions that make a mode of knowing 'legitimate' (i.e. acceptable and accepted) at a given moment and in a given domain (*ibid.* 51). To understand why Foucault chose this procedure for himself, and to get a better idea of what was at stake in this mode of analysis, we must turn to another essay, "Nietzsche, Genealogy, History," an essay he wrote some seven years before the talk he gave to the French Society of Philosophy.

The title of this essay indicates its topic. Here Foucault engages in a reading of Nietzsche that proclaims the virtues of genealogy as a historical practice. Genealogy is contrasted with the practice of the 'traditional' historian, who undertakes a metaphysical search for origins. In Foucault's account, Nietzsche is opposed to the "pursuit of the origin" for three reasons. First, because it attempts "to capture the exact essence of things, their purest possibilities, and their carefully protected identities" in the assumption that there exist "immobile forms that precede the external world of accident and succession."[22] Such an assumption can be maintained only by a kind of willful blindness to the details of history, which reveal that there is no secret essence at the origin of things, or, that if there is, it is an essence that "was fabricated in a piecemeal fashion from alien forms" (*ibid.*). The pursuit of the origin is thus also opposed for its solemn belief "that things are most precious and essential at the moment of birth" (*ibid.* 143).[23] This is taken to be "the moment of their greatest perfection," when they most closely

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[22] Foucault, Michel. "Nietzsche, Genealogy, History." *Language, Counter-Memory, Practice.* Ed. Donald F. Bouchard. Trans Donald Bouchard and Sherry Simon. Ithaca, NY: Cornell UP, 1977. P. 142. Hereafter referred to parenthetically in the text as "Nietzsche."

[23] Foucault cites Nietzsche's third aphorism in *The Wanderer and His Shadow.*

approximate the "immobile forms" that are their essence and purest possibility (*ibid.*). For it also marks the beginning of their decline and Fall away from the origin, into the world and time (*ibid.*). But the genealogist's attention to history finds nothing else *but* world and time; at the beginning of things one discovers "not the inviolable identity of their origin" but "the dissension of other things" (*ibid.* 142). Historical beginnings have more to do with an accretion of disparate elements than with creation *ex nihilo*; they are "derisive and ironic, capable of undoing every infatuation" (*ibid.* 143). And Nietzsche's final objection to the pursuit of origins is made on the basis that it postulates the origin as the site of truth (*ibid.*). In its function as the site of truth, the origin "makes possible a field of knowledge," namely, the historical discourse that seeks to recover or reconstruct the truth of an historical object by retracing the steps of its decline after its Fall into time (*ibid.*). But these attempts to restore an object to its original truth are inevitably undone by what Foucault calls "the excesses of its own speech" (*ibid.*). These derive from the historian's unacknowledged or unperceived perspective, and as a result involve a false recognition of the origin (*ibid.*). For the origin is the site of a truth not found but placed there, a truth not its own but one attributed to it by the present. Genealogy has no truck with this project. Rather than attempting (or purporting) to recover a pristine truth at the origin of an object (by way of a theoretical reconstruction that undoes its historical decline), genealogy attends to the "ancient proliferation of errors" that sometimes converge and give rise to new forms (*ibid.*).

Unifying Nietzsche's three criticisms of the traditional historian's pursuit of origins is their rejection of the latter's "meta-historical deployment of ideal significations and indefinite teleologies" (*ibid.* 140). The search for origins imposes a spurious unity

upon the vicissitudes of history by organizing them according to a higher-order or transcendent principle, a principle that is nowhere to be found within history, but which the historian imports into it from without. Moreover, because the origin marks the beginning of something whose existence may be traced through subsequent history, through the history it inaugurates, the pursuit of origins establishes continuity in history, demonstrating that "the past actively exists in the present, that it continues secretly to animate the present" (*ibid.* 146). But this establishment of continuity attenuates the radical singularity of each historical event, which is subsumed within the arc of an idealized teleology that stretches from the origin to the present, and beyond; difference is dissolved, and the emergence of objects properly understood in their individuality is made to conform instead "to the successive configurations of an identical meaning" (*ibid.* 151). Yet Nietzsche's criticisms are not just directed at the considerable simplification that this practice effects with respect to complicated historical processes, but also, and perhaps more importantly, at the fact that its simplified narratives inevitably serve the purposes of the present. As Foucault puts it, the metaphysician "[places] present needs at the origin" (*ibid.* 148). Regardless of whether the origin explains the travesties or the glories of the present, it directly anticipates or foretells the present, which, after all, is but the origin developed, the origin following a period of historical development. The present therefore marks a certain realization of the origin, or, more strongly put, the satisfaction of its purpose. Seen in this light, the historian's pursuit of origins cannot help but exhibit a tendency to reinforce or reify the present; the historian's assumption of a "supra-historical perspective" not only allows the present to recognize itself in the past,

but also "composes the finally reduced diversity of time into a totality fully closed upon itself"; it implies "the end of time, a completed development" (*ibid.* 152).

In contrast to the traditional historian's metaphysical pursuit of origins, the genealogist attends to the "descent" and "emergence" of historical objects and events. For Foucault, these terms document Nietzsche's refusal to engage in speculative idealizations regarding the appearance of new characters on the stage of history. Instead of an origin, things are shown to have "affiliations"; they descend from different groups (*ibid.* 145). These affiliations are never single, nor do they culminate in a coherent identity. The genealogist's analysis of descent reveals multiple and competing inheritances that intersect "to form a network that is difficult to unravel" (*ibid.*). Genealogy therefore permits a dissociation of the identity that traditional history is engaged in constructing; it shows that 'identity' is "an empty synthesis," the cloak that is draped over a profusion of "subindividual marks" to conceal a diverse and ignoble heritage (*ibid.* 145-6). For under the "unique aspect of [every] trait or concept," the genealogist discovers a plethora of contributing, often conflicting factors: the accidents, deviations, and reversals "that gave birth to those things that continue to exist and have value for us" (*ibid.* 146). Rather than finding "truth" or "being" at the foundation of things, one encounters accidents whose "exteriority" will mean their legacy is "an unstable assemblage of faults, fissures, and heterogeneous layers that [threatens] the fragile inheritor from within" (*ibid.*). It is precisely here, in Foucault's opinion, that the genealogical analysis of descent assumes its critical value: far from erecting or reinforcing foundations, it "disturbs what was previously considered immobile; it

fragments what was thought unified; [and] it shows the heterogeneity of what was imagined consistent with itself" (*ibid.* 147).

The genealogist's analysis of descent complements and supports his efforts to clarify the emergence of new historical objects and events. For Foucault, emergence designates the postmetaphysical principle of an object's appearance, which is no longer thought of as the culmination of a historical development but rather only as "the current [episode] in a series of subjugations" (*ibid.* 148). The genealogical study of emergence situates history upon or within a field of antagonistic forces where the struggle to survive and flourish in the face of opposition and adversity is what gives rise to events. The latter obey no destiny or mechanism but that of chance, the chance that accompanies every struggle to impose one's will on another or to realize it under difficult circumstances (*ibid.* 154-5, 149). The event therefore has to be reconceived: its is no longer the sign of an inevitable development, but rather marks the fortunate success of an agent in satisfying its needs; it is no longer dissolved within "an ideal continuity," as are the decisions, treaties, reigns and battles recognized by traditional history, but rather retains the radical singularity of a "reversal of a relationship of forces, the usurpation of power, the appropriation of a vocabulary turned against those who had once used it" (*ibid.* 154). The latter can all occur within or underneath what traditional history construes as continuity, while the former are often just the surface manifestations of profound reconfigurations effected by "events," events taking place in the "non-place" where different interpretations of existence collide and compete for supremacy (*ibid.* 150). That is to say, decisions, treaties, reigns and battles are but late responses ratifying or contesting (it matters not) the surreptitious institution of new interpretations, the subtle

attachment of new meanings to tired old concepts, the forging of entirely new objects out of discarded materials. These events respond to highly specific and variable needs, and cannot, therefore, be said to have or to realize an essential meaning. They do not gradually unfold the implications of an origin, and slowly fulfill its purpose; indeed, precisely the converse is true: events tear things out of their original context "in order to impose a direction, to bend [them] to a new will, to force [their] participation in a different game" (*ibid.* 152). The analysis of emergence thus discloses a history of constant change, discontinuity and violence in stark contrast to the smooth developments asserted by traditional history.

At stake in the genealogical analysis of descent and emergence is an effort to make history "effective" – that is, to place "within a process of development everything considered immortal in man" (*ibid.* 153). By demonstrating that no trait or concept is without history, the genealogist removes the basis of traditional history's "suprahistorical perspectives" (*ibid.* 152); he shows that there is nothing so constant or stable that it can serve as a vantage point from which it is possible to survey history from the outside, to achieve the comprehensive view that allows history to be mastered, and that includes the notion of "truth,"[24] whose timelessness is assumed in the traditional historian's pretensions to objectivity ("Nietzsche," *LCMP* 152). This is equally the case for the body, the nature of consciousness, the instincts, and the emotions – things we tend to feel are without history, but which are, in fact, historical through and through, being always inscribed by (or within) interpretations that attach different meanings and values to them

[24] Whose revered history may be described as nothing more than the history of an error: "Initially made available to the wise, then withdrawn by men of piety to an unattainable world where it was given the double role of consolation and imperative, finally rejected as a useless notion, superfluous, and contradicted on all sides" ("Nietzsche," *LCMP* 144).

at different times (*ibid.* 139). The "relentless erudition" of the genealogist makes the historical specificity of these objects quite explicit, and thereby makes it impossible for the present to recognize itself in the past (*ibid.* 140, 153). More specifically, the present finds itself unable to understand the past in terms of said objects, which, it finds out, are specific to a given historical conjuncture and cannot serve as the basis of consolatory comparisons. Indeed, genealogy forces the present to contend with the "substitutions, displacements, disguised conquests, and systematic reversals" whose violent institution of change made the present profoundly discontinuous with the past (*ibid.* 151). Of course, in so doing, genealogy also reveals the transformations undergone by human identity, which, divested of essential characteristics, is no longer a fate to which we are consigned by an origin but rather just a temporary mask, a mask that conceals nothing except the mask it replaces. It is thus, again, that genealogy performs the critical function that makes history "effective": by "[introducing] discontinuity into our very being," it shows that identity is fleeting, a provisional arrangement of heterogeneous traits articulated into a tenuous unity only by force of will (*ibid.* 154). That is to say, it shows the violence involved in forcing divergent lines of descent to meet in a new object, and the force required to hold them together. For unlike the traditional historian, the genealogist does not seek to reinforce identity by pursuing the origin that explains, justifies, and reassures as to its permanence, but rather to liberate from identity by disclosing its tensions: the paradoxes and contradictions that derive from its competing affiliations and constantly seek to tear it apart. Indeed, by freeing the "countless spirits" that inhabit and dispute the possession of every historical object, the genealogist assists

the process of its disintegration, indicating the points which may be exploited in a newly – that is, self-consciously – parodic relation to history (*ibid.* 160-1).

Foucault's analysis of Nietzschean genealogy provides a concise statement of the approach he would utilize in much of his own work, and thereby fills in some of the gaps left in the talk he gave to the French Society of Philosophy. It is particularly helpful in explaining his objection to the procedures most often used to analyze the entanglement of rationality and power, which, to refresh our memory, comprised "an investigation into the legitimacy of historical modes of knowing" ("Critique," *PT* 49). However understandable their tendency to raise the question of enlightenment in terms of knowledge (in a context that offered greater opportunities to pursue Kant's critical injunction to "know knowledge" than it did his calls for enlightenment), by seeking something like an "historical destiny" of knowledge, and by trying to connect this historical destiny with "the conditions of the constitution and legitimacy of all possible knowledge," those who mobilized these procedures had engaged in a search for origins (*ibid.* 48-9). The first aspect of the task they chose for themselves implied an insensitivity or blindness to the ruptures, discontinuities, and singularities of history (or rather, a willingness to subsume these within an idealized teleology that bore the name of "destiny"); the second, an apparent ignorance of the fact that the conditions of the constitution and legitimacy of knowledge were not timeless and transhistorical but thoroughly determined by time and place. Had not Nietzsche shown how the "chance" birth of reason implied its irreducible historicity?

> Devotion to truth and the precision of scientific methods arose from the passion of scholars, their reciprocal hatred, their fanatical and unending discussions, and their spirit of competition – the personal conflicts that slowly forged the weapons of reason ("Nietzsche," *LCMP* 142).

Passion, hatred, fanaticism and competition – the existence and operation of these "all too human" instincts could be precisely situated in the historical field, and their implication in the emergence of new forms and practices of rationality could be defined. To the genealogist, their presence signaled the lack of a timeless standard of legitimacy against which an empirical knowledge could be measured; there was no norm that did not itself undergo radical change, revision, or replacement by something new, that is, by the interpretation of an individual or group who was just a little more successful in the perpetual contest of wills that drove history and gave rise to events. Rationality could thus be said neither to approach nor depart from an unchanging standard that remained apart from it. Rather, its changes had to be grasped in the complexity of their relation to shifting concepts of truth and legitimacy, to concepts whose roles and meanings shifted as different agents struggled to realize their will by imposing their own interpretations of those concepts upon others. To claim the former – that the historical development of rationality reflected either its progress towards truth or its regression into illegitimacy (or even some dialectically nuanced version of both) – one would have to assume that the concepts of truth and legitimacy had remained constant, that they meant the same thing in the present as they did in the past. For the genealogist, this assumption is simply erroneous; moreover, it would demand that the past be judged by the standards of the present. In other words, to claim that rationality had approached or departed from truth or legitimacy was to take whatever concepts of truth and legitimacy happened to prevail at present and project them back into the past, thus submitting the past to one's own interpretation of those concepts, and thereby making a complex and discontinuous history

of rationality take the form of a simple linear development, either towards truth and legitimacy (demonstrating progress) or away from these (demonstrating regression).

In contrast to these procedures, Foucault's genealogical examination of "*eventualization*" makes no judgments regarding the legitimacy of an historical mode of knowing. In addition to their metaphysical sins, such judgments fail to appreciate the ineluctable, indeed, the *necessary* relation between knowledge and power at any given historical conjuncture. For Foucault, an implication in power relations is not something that knowledge falls into when it goes astray, or when it forgets its rightful limits; rather, it is unavoidable, a necessary condition of the existence of knowledge:

> Nothing can exist as an element of knowledge if, on one hand, it does not conform to a set of rules and constraints characteristic, for example, of a given type of scientific discourse in a given period, and if, on the other hand, it does not possess the effects of coercion or simply the incentives peculiar to what is scientifically validated or simply rational or simply generally accepted, etc. Conversely, nothing can function as a mechanism of power if it is not deployed according to procedures, instruments, means, and objectives which can be validated in more or less coherent systems of knowledge ("Critique," *PT* 52).

Foucault goes on to explain that the "analytical grid" of knowledge and power "is not made up of two categories with elements which are foreign to each other" (*ibid.*); rather, it describes a nexus of power/knowledge whose terms are thoroughly imbricated and necessarily reliant upon each other. This view of the relationship between knowledge and power has important methodological ramifications for Foucault's historical-philosophical practice. The task, quite obviously, cannot be that of putting rationality on trial for its exit from legitimacy, from a state or time when knowledge was transparent and neutral, and when it left its objects untainted by power relations. For Foucault, this is a "sterile" project: not only does "the field [have] nothing to do with guilt or innocence"; it also makes no sense "to refer to [a good because neutral] reason as the contrary entity

to [a bad because powerful] nonreason."[25] Instead, because knowledge is always already implicated in relations of power, the task becomes something quite different.

The genealogical examination of *eventualization* proceeds from the simple fact that at a given historical moment there exists a particular "ensemble" of power/knowledge and analyzes the system that supports it and makes it acceptable ("Critique," *PT* 53). Foucault reminds his listeners that an ensemble is never to be understood as acceptable "in general," as if it were in accordance with some basic or fundamental notion of legitimacy, but rather as acceptable only at a particular time and place, at the particular time and place that it *was* accepted (*ibid.*). Thus does genealogy seek to identify the rules and constraints that govern a particular discourse of knowledge at a particular moment: it is to these that an element of knowledge must conform in order to be accepted as such, and to possess the 'benefits' – that is, the effects of power – proper to knowledge at that time (such as, for example, an ability to persuade or coerce and thereby to induce or restrict actions in others) (*ibid.* 52). Nor can the emergence and subsequent transformation of these rules and constraints be said to manifest their own evolution towards legitimacy and truth, and thence to realize the development of an increasingly legitimate and true knowledge. They do not correspond to the successive appearances of an "originally existing right"; the ensemble of power/knowledge they organize is neither "inscribed in any *a priori*, nor contained in any precedent" (*ibid.* 54). Because their history is that of a series of disparate events, the rules that govern the acceptability of a system obey no destiny or mechanism but that of chance; indeed, the form they take at a particular moment is but the singular effect of a multiplicity of

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[25] Foucault, Michel. "The Subject and Power." *Essential Works, Volume 3: Power*. Ed. James D. Faubion. NY: The New Press, 2000. P. 328.

determining elements (*ibid.* 57). Figuring predominantly among such determining elements are interactions between individuals and groups, interactions whose "variable margins of non-certainty" mean that they do not function according to any principle of closure (*ibid.* 57-8). Within a historical field comprised of antagonistic forces, it is always possible that interactions could have gone differently, and produced a different result. To identify the emergence of new conditions of acceptability of an ensemble of power/knowledge is thus not only to identify the contingency of an ensemble, but also, and more specifically, its contingency upon a certain exercise of force. To put this another way, it is to identify in a condition of acceptability what initially made it difficult to accept: "its arbitrary nature in terms of knowledge, its violence in terms of power" (*ibid.* 54). By exhibiting the force required for its institution, the genealogist makes it impossible to believe in an ensemble's necessity or inevitability. And thus, as Foucault puts it, "it is necessary to take responsibility for this structure in order to better account for its artifices" (*ibid.* 54-5).

Chapter 3:

Francis Bacon and The Institution of Modern Science

This chapter, like the one that follows, attempts to illustrate the productivity of a genealogical analysis of the history of rationality. In contrast to the analysis of Adorno and Horkheimer, which represents Francis Bacon as one exemplar of a development that began long before him, this chapter emphasizes the singularity of Bacon's work. It demonstrates the break that Francis Bacon instituted with respect to his predecessors, and identifies the force required to institute that break. It does so through an attention to the *ascetic* dimension of Francis Bacon's work, which reveals that scientific rationality was the product of a series of practical exercises that transformed the scientist and constituted them in a new mode of having the capacity for true knowledge. For with his calls to found scientific knowledge no longer upon the learning of the past, but upon rigor of method, Bacon advanced the production of a new kind of subject, a subject liberated from the bondage of historical opinions and beliefs, and relieved of the imperfections of its sensory perception and finite mental power.

When, in his paean "In Praise of Knowledge," Francis Bacon (1561-1626) claimed that "a man is but what he knoweth" (*MW* 34), the stage was set for an extremely powerful expression of the utopian hopes invested in a new mode of reasoning. For insofar as this discourse innocuously equated humanity with its knowledge, an improvement of the latter promised to bring with it an improvement of the former, which is to say that if humanity learned to correctly use its rationality, it would itself be positively refashioned

and improved. These improvements would manifest themselves in two ways, or at two 'levels': in those positive effects that were located interior to the correctly reasoning self, and in those which were exterior to it, or rather, which consisted of the new relations that would be established between the rational self and the natural world which was exterior to it. Exemplifying the former are the series of psychological benefits that Bacon claimed were inherent in the acquisition of real knowledge, which would "clear the mind of all perturbations" and provide "a true and only natural pleasure, whereof there is no satiety" (*ibid.* 34). But ridding humanity of its "vain imaginations" did not just promise the rather vague pleasures associated with raising oneself "above the confusion of things"; the correct use of reason was not "a view only of delight" (*ibid.* 34). For it would also produce the second and rather more concrete improvement of allowing humanity to "discern the riches of nature's warehouse, as the benefit of her shop" (*ibid.* 34). In other words, the adoption and exercise of this new mode of rationality would produce a radical shift in humanity's perception of nature, and thereafter in its relationship with nature, such that humanity would henceforth be able to occupy the position that Bacon believed was its right: a position of ownership and mastery with respect to nature. The acquisition of real knowledge would then begin to enrich humanity not just in the abstract but concretely, materially: "Shall [humanity, having begun to exercise its reason correctly and altered its relationship to nature] not be able thereby to produce worthy effects, and to endow the life of man with infinite new commodities" (*ibid.* 34)? For Bacon, it was therein, especially, that the "happiness" of achieving the "match between the mind of man and the nature of things" lay: in the rewards to come of replacing those "clouds of error," opinion and traditional belief, with

the knowledge that would be produced (only) by a completely new mode of rationality – a *scientific* mode of rationality – based on rigorous, systematic inquiry into nature and the methodical processing of results (*ibid.* 36, 34).

Yet this would be no small task. Because the discipline was so thoroughly saturated with error, the entirety of its 'knowledge' would have to be swept away, and a "general Renewal" (Bacon, *NO* 2) made. But perhaps more important than simply dispensing with the knowledge accumulated through the ages and beginning again was to begin again "from correct foundations" (*ibid.* 2). This would involve the elaboration of a new conception of subjectivity, a subjectivity whose knowledge-producing practices were rigorous and systematic. As Bacon put it, if the sciences were to advance and thereby situate humanity in its proper position of mastery over nature, "a quite different way must be opened up for the human intellect than men have known in the past" (*ibid.* 6). It is important to notice that this assessment of the sciences conceived of their progress as being contingent upon finding and implementing the new ways of thinking that would realize "a more certain and altogether better intellectual procedure" (*ibid.* 36). For once the practice of science is so understood, as a specific "way" of conducting one's rationality, or, to make the point even more explicit, as a kind of practice of the self, its links to a determinate mode of subjectivity will be all the more easy to establish and grasp.

In other words, the development of real science hinged upon a change in mental processes and habits, which is to say on a certain practical refashioning of oneself, or, to put it more precisely yet, on an *askesis*. In this context, Bacon's texts may be productively read, among other ways, as the guides to that *askesis*, or, in other words, as

'manuals' to correct and improve the conduct of one's reason. Indeed, such a reading appears entirely validated by Bacon's statement regarding the uncertainty, the difficulty, and the solitude of the ascetic "ways" to which, as the pioneer of his method, he had committed himself. For these had been willingly undergone not only to satisfy his own (private) "eternal love of truth," but also precisely "so that at the end we may be able to provide more reliable and secure directions for present and future generations" (*ibid.* 11). It is, moreover, in this context that we must situate Bacon's critical reappraisal "of the science or learning which the human race currently possesses" (*ibid.* 14), which demonstrated that the old "ways," although perhaps "easy and downhill," had in fact led humanity to "impassible, precipitous places" (*ibid.* 3), and resulted in the situation which Bacon claimed had existed for many centuries: "that the sciences are almost stopped in their tracks, and show no developments worthy of the human race" (*ibid.* 7).

In Bacon's view, the fundamental weakness of the old "ways" could be traced to their imperfect social and historical nature. The historicity of scientific rationality was seen not only as something inessential to it but in fact as the mire from which it had to be extricated, or whose effects, at the very least, had to be minimized. For it was history which had "[distorted] the sight of the human mind" (*ibid.* 22), and history which had brought the mind to be "occupied in so many strange ways that [it had] no even, polished surface available to receive the true rays of things" (*ibid.* 18). These claims deserve our attention, for at stake within them is nothing less than a quintessentially modern concept of rationality as a property and possession of the subject, which is to say as an essentially subjective faculty. Here, we see this concept emerge as the consequence of a radical differentiation and opposition of rationality and history. In the lines quoted above,

history was construed as something that broke in upon rationality from the outside; it was something wholly extrinsic to a rationality whose seat or site was conceived as "the human mind." In addition, however, history was opposed to rationality insofar as it occluded the smooth functioning of the mind. It was to the precise extent that the "ways" of the mind were historical that its "sight" was cloudy and confused. It seemed clear, then, that the renewal and progress of science depended upon bringing rationality's deviation into history to an end, and on 'returning' it (perhaps for the first time) to its rightful foundation in the human mind (or in the modern mode of subjectivity). In order to appreciate the nature and scope of the *askesis* implied by this task, we must now specify how rationality had hitherto been embroiled in history.

For Bacon, the ways of the mind were "historical" insofar as they were derived from the institution (or institutions) of science. This derivation went far beyond propriety, and the ultimately necessary recourse of every rationality to some form of institutionalization, by locating the very foundation of scientific rationality in its institutional character, which is to say in factors that were inessential and extrinsic to its true core. For scientific rationality had been authorized by, and so founded in, the tradition and popularity that attested to its institutional (and indeed, historical) location, rather than the timeless rigor of a methodology that could be applied by any correctly reasoning subject. Because the validity of scientific knowledge was not a function of the precision and systematicity of an individual's inquiry and reflection – criteria which, for Bacon, were not only independent of the historicity of rationality's institutional location but actually provided the means of overcoming the effects of that historicity – but a function rather of eminently historical vicissitudes of fashion and taste, time had "brought

down to us [only] the light things that float on the surface, and ... sunk what is weighty and solid" (*ibid.* 8).

These lamentable characteristics were not so much the necessary product of institutionalization as such as they were the contingent product of the historically specific manner in which scientific rationality had been institutionalized. They were the product, in other words, of the particular ways in which the institution of science was and had been configured, and especially of the particular knowledge-producing practices that composed it. These concrete, specifiable practices not only constituted the institution of science and defined its specific form of rationality; they also defined the mode of subjectivity of the individuals within that institution, of those individuals who, by performing the knowledge-producing practices of the institution, 'did' science.

Bacon located a particularly pernicious instance of these practices in the "simple, non-scientific method of discovery which is most familiar to men" (*ibid.* 67). This method, he wrote,

> Is simply that in preparing and equipping himself to find something out, anyone first researches and reads what others have written on the subject; then adds his own thoughts, and with much mental agitation interrogates his own spirit and calls upon it to open its oracles to him. This procedure has absolutely no foundation and simply spins around on opinions (*ibid.*).

The first thing to note of this procedure is its starting point: the learning of the past. This was one of the principal ways that history maintained a grip on the human mind, defining its "ways" and distorting its "vision." For scientists had not approached this learning critically, with an eye to discover and address its mistakes and shortcomings, but rather in the belief that it represented an unimpeachable pinnacle of human achievement. Indeed, the ingenuous faith in its truth and accuracy was so firm that past learning could and did

serve as the foundation of present scientific work. This would perhaps not have been so bad if the former had been open to revision by the latter, but this was not the case: the strength of the faith in established knowledge was such that it was impervious to change by subsequent work, which was relegated to the secondary and subordinate position of being its servant. All too often, the science of the present sought only to demonstrate the truth of established knowledge, or the accuracy of conclusions anticipated on its basis. The prevalence of this framework of belief therefore meant that the first-hand practices of observation and experiment, to the extent that they were even used, could introduce little more than minor emendations to the edifice of established knowledge. After all, as Bacon sarcastically put it, "now that nothing better can be discovered, it remains only to adorn and cultivate what has already been discovered" (*ibid.* 7). It was thus that the sciences had been "stopped in their tracks," as we already observed – for in this context, they had become "like statues, admired and venerated but not improved" (*ibid.*).

If this situation was one of a certain dominance and domination of the past over the present, then it is also equally fair to construe it as a situation that privileged "words" over "works." For as we just saw, the starting points for the prevailing model of scientific inquiry were not observation and experiment – the 'first-hand' practices we noted above – but rather the words that constituted received and accepted learning. To Bacon, these attempts to "[seek] things in words" ("Of Tribute," *MW* 36) exemplified the mistaken priorities of the discipline, which, when it implemented experimental practices at all, forced them to conform with what was already written and 'known,' instead of granting them the authority to dictate what should be written as new knowledge. But even worse, perhaps, was the fact that this priority of words was such that it was possible

to practice science almost entirely within their realm. Not only was there little concern for the practical use or benefits of scientific knowledge; this indifference allowed much of what passed for knowledge to remain unverified by observation and experiment. This bespoke of the rather 'academic,' or, perhaps better, the scholastic configuration of science as a locus of ideas and words rather than practical activities.

This 'academic' configuration of science was further attested to, and indeed, partly explained by the scientific training of the day, which, as Bacon described it, seemed oriented more towards familiarizing students with the history of scientific thought than towards providing them with the methodological principles by which their own observation and experimentation should be conducted. Instead of producing "discoverers," and those who could "make notable improvements to the discoveries," this training produced "a series of masters and pupils" (*NO* 7) – men whose thought had been "confined and imprisoned in the writings of certain authors" by a system of readings and exercises whose design was such "that it would hardly occur to anyone to think or consider anything out of the ordinary" (*ibid.* 75-6).[26] With these words, of course, Bacon had described nothing less than the production of a mode of subjectivity by the concrete historical practices of education and training which existed in the institutions of higher learning in Europe. Instead of cultivating a free and powerful faculty of rationality in the subjects that they produced, those practices had stifled the growth and exercise of rationality by confining and imprisoning thought within the writings of past authors. Thus did they produce subjects who were prepared only to join the "sect" centered

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[26] This "ordinary" should be understood as that which was already accepted as knowledge, the received learning of the past.

around those authors' opinions, whereafter "they [added] no distinction to the sciences themselves, but [acted] like servants in courting and adorning their authors" (*ibid.* 7).

For with their thought narrowly circumscribed by the established learning of the past, the present activity of scientists tended to be channeled in the sterile and morally suspect direction of attempting to defeat an academic adversary – a member of an opposing "sect" – in disputation (*ibid.* 16). These aims made for a mode of scientific practice that was rhetorical more than practical, a mode of practice concerned more with the glory of defeating one's opponent in the lecturing theatre than with the action of conquering nature out in the world (*ibid.* 30). This was entirely in keeping with a discipline whose priority and primary medium, as we have observed, was words – but in Bacon's view fell far short of being scientific. For the aims of this rhetorical mode of practice did not require of science that its 'knowledge' meet what Bacon regarded as the main criteria of scientificity, that it be both "sure [and thus, insofar as it was sure], demonstrable" (*ibid.*); it needed only to be convincing in the arguments that set it forth. In other words, this discourse did not require practical verification in order to circulate as 'knowledge'; it was neither tested by scientific observation and experiment, nor obliged to produce "works" through the discovery of "arts" (*ibid.* 15-6). In order to win arguments and gain the support of listeners, it sufficed to have "nice, plausible opinions" (*ibid.* 30) based on "probable reasonings" (*ibid.* 16) – a standard whose laxity meant that much of what passed for scientific 'knowledge' was in fact only speculation and hypothesis, a "web of the wit" that "[could] work nothing" ("Of Tribute," *MW* 34-5).

Yet the speculative and thus unproductive nature of scientific knowledge is not fully explained by referring it either to its aims or to the standards that those aims

implied. Here, it must also be remembered that these "webs" had been woven out of words. This, of course, is to recall that they were founded not by the rigorous analysis of experience in the present, but rather in a return to the learning of the past, where scientific practice began. Thus, for all the sophistication of their "elegant arrangements" (*NO* 34) of knowledge, which would "knit [things] into certain courses[27] ... [and] reduce them to their principles" ("Of Tribute," *MW* 34), these discursive "webs" were like "a magnificent palace without a foundation" (*NO* 2). They were constructed of second-hand materials, so to speak; materials whose 'solidity' did not derive from a personal experience of their truth, such as would be provided by the first-hand practices of observation and experiment, but rather from the authority of tradition. All that vouchsafed these materials, in other words, was a combination of popular acceptance and historical longevity – yet from these weak or nonexistent foundations entire systems were spun out by "the disputation of the learned" ("Of Tribute," *MW* 34). The problem inherent in this practice was that, without any empirical verification, even the most rigorous of these systematic expansions of past learning could only multiply any errors contained in the earlier work, and thereby increase the distance of scientific knowledge from the nature it purported to describe.

In any case, rigor was not the most noteworthy characteristic of this rhetorical mode of scientific practice. It was frequently outweighed by the desire to accrue glory and fame, or the recognition that came of defeating one's opponent in the lecturing theatre. I emphasize this point for two reasons: first, because it speaks again to the presence within science of what, for Bacon, was an "unscientific" mode of subjectivity;

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[27] Sequences, e.g. of cause and effect (*NO* 523).

and second, because it directly links that unscientific mode of subjectivity to the poverty of science. In other words, it was not just that a competition for glory completely misunderstood the true ends of scientific knowledge, which, in Bacon's view, was not to be sought "for amusement or ... dispute, or to look down on others, or for profit or for fame or for power or any such inferior ends, but ... [only] for the uses and benefits of life" (*NO* 13); the misunderstanding of those ends meant that scientific knowledge tolerated a rather trivial and empty kind of truth, a truth that was a function of little more than the desires of men and of the power of their rhetoric. The "spurious dignity" (*ibid.* 11) imposed upon a discovery by "[wrapping it] up and [presenting it] with a variety of [rhetorical] devices" may have helped "cause a change in belief and transfer the leadership of opinion to [oneself]" – but it did not in any sense "augment philosophy and the arts in fact and effect" (*ibid.* 8-9); it was good only for the glorification of one's own name.

We have now seen how the traditional configuration of science imposed considerable limitations upon its usefulness by confining scientific rationality within the writings of past authors and by producing subjects who were prepared only for the activity of seeking glory in rhetorical disputation. These were shortcomings that appeared to have a fairly uncomplicated, if by no means easy, solution: to reconfigure the institution of science such that it produced a new kind of subject who was prepared for the analysis of experience in the present, and who attained to a different and higher kind of truth, a truth that was independent of the petty desires of men. Such truth would signify the glorious achievement of a correspondence between scientific discourse and reality, a "happy match between the mind of man and the nature of things," such that

"knowledge [would be] a double of that which is; the truth of being and the truth of knowing ... all one" ("Of Tribute," *MW* 34). Such truth could not be attained just by setting their eyes, however unrelentingly, upon a new standard. It would also require "a true and proper humiliation of the human spirit" (*NO* 11) in scientists, an *askesis* that would eliminate the influence of all-too-human passions on scientific rationality.

The production of a new mode of subjectivity implied in the first place that scientists be convinced not simply of the validity or importance of experimental analyses, but of their epistemological priority over the learning of the past. Observation and experiment had to be granted the authority that would see them establish and define scientific theory and knowledge, instead of just propping them up. The nigh axiomatic belief in the perfection of established learning thus had to be dissolved, which Bacon attempted to do by reconsidering the meaning of the word "antiquity." If antiquity, as seemed only right, "should mean the oldness and great age of the world," then the designation, he thought, "should be attributed to our times, not to a younger period of the world such as the time of the ancients. True, that age is ancient and older in relation to us, but with respect to the world itself, it was new and younger" (*ibid.* 68). The 'youth' of the ancients meant that they had not been "enriched and stocked with [the] countless experiences and observations" that defined Bacon's own age, and not theirs, as "the older age of the world" (*ibid.* 69). And this youthful lack of experience established a limit upon their learning; although the ancients may indeed have "acquitted themselves admirably," this was only with respect to the "things that were within the range of their intelligence and abstract thinking" (*ibid.* 10), which had not yet been broadened by the experience accumulated in the intervening time. This experience, the experience of age,

was rather the possession of the moderns, whose increasingly frequent "long voyages and travels," if not their science, had brought "many things in nature" to light (*ibid.* 69). Despite the wealth of new material that was available to it, however, the modern age had not yet been able to capitalize on the experience that had been accumulated through time. For it had mistakenly endowed the work of past authors with the "unlimited credit" owed to the old and wise, apparently preferring to betray the evidence provided by experience (and therein deny Time its rightful due) rather than sully the reputation of those in whom it had placed so much faith (*ibid.*).

Nonetheless, even if arguments like this, which, by revaluing the concept of antiquity so that it pertained more to the modern age, went some way towards validating the analysis of its own experience, then more needed to be said regarding the form that such analyses should take. For although a turn towards experience would appear to address both a. the erroneous foundation of science in the past and b. its preoccupation with words over works, this transformation could still come to naught if analyses were pursued with the "undisciplined license" that had hitherto characterized most scientific inquiry (*ibid.* 9), and which bespoke of the excessive influence of the "human spirit" (and therefore also of history) upon science. Indeed, Bacon's wide-ranging exploration of human learning had already shown him that in those rare cases when scientists had committed themselves to "the waves of experience," they tended to "practice a kind of aimless investigation ... since even they [did] not work by fixed rules" (*ibid.*). For the most part, the method of their inquiries had been *ad hoc*, thrown together according to the exigencies of the specific problem that they had been called upon to solve. That is to say, experiment and observation were not geared towards the production of systematic

knowledge, but rather towards obtaining "certain specific results and to get them fast and directly" (*ibid.*). As Bacon put it, they sought "profit" rather than "illumination" (*ibid.*). But insofar as this desire for profit induced a hasty and piecemeal approach to empirical inquiry (analogous to the worrying lack of rigor which it induced in scientific reasoning), it actually helped maintain the poverty of science, leaving scientists fumbling in the dark when it came to the mysteries of nature. Even those inventions which had most revolutionized his age, for example – printing, artillery, and the compass – and which, to many, provided proof of its abundance – could not, Bacon claimed, be said to have been discovered by scientific methods but had rather been "stumbled upon and lighted upon by chance" ("Of Tribute," *MW* 36). It thus seemed imperative to practice a new discipline and restraint in empirical inquiry, and begin to seek illumination (or knowledge) rather than an immediate profit. The short-term sacrifice would result in a long-term gain. By giving up its attempt to obtain "certain specific results ... fast and directly," the new "natural history" would be able to "shed light on the discovery of causes," and the axioms thereby formulated would eventually "bring whole companies of works ... revealing them not singly but in quantity" (*NO* 20).

Of course, the *askesis* implied in this transformation of science consisted of more than just a 'negative' moment of renunciation (of profit); it involved the replacement of one set of practices with another, equally 'positive' set. These new practices would manifest the discipline required to produce "illumination" by basing themselves upon the strictures of a method, both in empirical inquiry and in the reasoning that followed. This method would provide the "thread" that would lead humanity out of the labyrinth of nature; but it would also make "the whole road, right from the first perceptions of sense,"

sure and well-founded (*ibid.* 10). For it would not only found knowledge in experience rather than the learning received from the past; the methodical discipline of its knowledge-producing practices would also, and more specifically, ensure that the new "way" traveled by the intellect would be secured from the faults and weaknesses that plagued the old. It would do so by imposing an order upon those practices, an order and a regularity that could be construed as machine-like insofar as they were to minimize the potential for the 'human element' – all the imperfection and variability associated with humanity's finitude – to come into play, or to play too much of a role, in the production of knowledge. Indeed, the disciplined order of the new kinds of scientific practices Bacon envisioned would not only rid science of its contamination and distortion by humanity's more narrowly historical concerns for glory or material profit, for example (which, as we saw, presumed or required a 'flexibility' of experiment and reasoning that was antithetical to the rigor which Bacon called for); it would also address more fundamental problems stemming from the weakness of human sense perception and the frailty of its reasoning. This it would do simply and effectively by leaving much less to their variable "power" and "excellence" (*ibid.* 11), instead allocating much of the actual "business" of scientific rationality to the "machines" (*ibid.* 28) of experiment and induction.

To fully appreciate the necessity of this reconfiguration, we should recall that Bacon's conception of truth was one of correspondence between knowledge and being. If knowledge was to be true, in other words, it had to be the obedient "double" of reality (*ibid.* 24).[28] This implied that the key to producing true knowledge was to make the

[28] Interestingly, this "obedience" to nature is the prerequisite to "conquering" it.

human mind as neutral or transparent a tool of reflection as it could be. It could not be allowed to depart from nature, whether by adding to it in a flurry of mental creativity, or by subtracting from it due to weak or defective sensory perception; to truly know it, the scientific mind had to "stay faithfully and constantly with things" (*ibid.* 11). Experiment and induction would achieve this propinquity between knowledge and being; the former by the fact of its "subtlety," which, being "far greater than that of the senses themselves," needed only to be brought to bear in a procedure "devised and applied specifically for the question under investigation" (*ibid.* 18). These appropriately devised procedures would "bring the matter to the point that the senses judge only of the experiment, [while] the experiment judges of the thing" (*ibid.*). By relying much less upon the senses at the crucial stage of actually apprehending or grasping nature, their inherent unreliability would no longer have the same opportunity to result in a false image of nature, an image which was not the "double" of reality but which, rather, had departed from it. But the benefits of these newly accurate images could still be lost if axioms of nature were extracted from them with the same lazy and impatient reasoning that had gone before, as the latter "[let] nature slip out of our hands" by "[leaping] immediately from sense and particulars to the most general propositions" (*ibid.* 16). The haste with which these propositions were advanced meant that they were not so much truthful accounts of how things took place in reality as they were fictions, creative attempts "to publish a dream of our imagination as a model of the world" (*ibid.* 24). The reasoning that produced them therefore had to be replaced by one that "respects the senses, stays close to nature, fosters results and is almost involved in them itself" (*ibid.* 16). This form of reasoning was induction, which, by slowly and patiently eliciting axioms step by step (*ibid.* 17), and by

"rising in a gradual and unbroken ascent to arrive [only] at last at the most general" (*ibid.* 36), preserved at each stage the certainty of experimental results. It therefore comprised the "lead and weights" required to "check every leap and flight" (*ibid.* 83) of the human understanding, which, Bacon suggested, was quick to tire of the demands of fidelity to experience, and loved to flee into generalities "so that it can rest" (*ibid.* 36).

Bacon's description of induction as a kind of "lead and weight" that needed to be placed upon the understanding to force it to remain close to nature is felicitous, as it helps to remind us of the ascetic dimension to his renewal of science. The "machines" of experiment and induction did the "business" of scientific rationality not by taking over its work and leaving it idle, in other words, but rather by imposing a strict order upon its activity. They were not external to or independent of human existence, but rather were humanly performed practices that transformed and redefined scientific rationality as systematic and rigorous, constituting it as a form of rationality whose knowledge was guaranteed to remain close to – in fact, the exact "double" of – nature. And with this transformation of rationality, of course, went a transformation of subjectivity, or of the mode of being of the subjects performing these practices. First of all, because their performance effected "a true and proper humiliation of the human spirit," which is to say that they produced a subject that was disciplined and rigorous in the exercise of its rationality. But second, and from Bacon's perspective, probably more importantly, because the subject that was disciplined and rigorous in the exercise of its rationality would be liberated from the bondage of historical opinions and beliefs, on the one hand, and freed from the weaknesses and defects of its sensory perception and finite mental power, on the other. Thus liberated by its discipline, the modern subject would know

nature in a radically new way, undistorted by history or by the finitude of its perspective. That is to say that it would know nature objectively, a kind of knowledge that would install it in a position of ownership and mastery over nature, and allow it to dispose of nature as it willed. Liberated by discipline, and a conqueror by virtue of its obedience: these statements define the contours of the modern subject as it emerged from the writings of Bacon.

Chapter 4:

René Descartes and The Production of Subjective Rationality

Like the preceding chapter, this chapter attempts to illustrate the productivity of a genealogical analysis of rationality with respect to another pivotal event in its history: Descartes' articulation of the "cogito." Its attention to the *ascetic* dimension of Descartes' work reveals that the modern conceptions of rationality as an essentially subjective faculty, and of subjectivity as essentially rational, were the product of that series of practical exercises he called the "Meditations." The meditative application of doubt transformed the philosopher and constituted him in a mode of having the capacity for true knowledge, a cognitive knowledge characterized by certainty.

In arguing for a general renewal of science that would replace old and ineffective knowledge-producing practices with new and better ones, Francis Bacon advanced the production of a new kind of subject. Experiment and induction represented a new "way" of exercising one's rationality, a disciplined way which would keep rationality close to nature and thereby guarantee the truth of its knowledge. These practices would thus effect a transformation in the subject that performed them: by forcing rationality along a new path and into a new configuration, they would constitute the subject in a mode of having the capacity for a truthful apprehension of nature. An individual's access to truth was in fact dependent upon this *askesis*, and therefore upon adhering to the specific and specialized activities that would produce it. In other words, the acquisition of knowledge was indissolubly linked to a certain mode of conduct or 'ethic,' and indeed, an ethic not

only of 'scientific' rigor and systematicity, but also of the more traditionally 'ethical' themes which scientific rigor and systematicity demanded. We saw, for instance, that these last required humility and charity in the scientist, who was to seek "illumination" for the benefit of human life rather than "profit" for himself. Only thus would the scientist be free of the 'historical' considerations that distorted the "sight" of the mind, and only thus would true knowledge be possible.

Like Bacon, René Descartes perceived a utopian dimension within subjective rationality – but with an important difference. In contrast to Bacon's belief that the realization of this utopian potential was contingent upon the *askesis* or practical refashioning that would constitute the self as a knowing subject and allow it to discover scientific truth, Descartes argued that it inhered in the very nature of subjectivity to possess the faculty of rationality and therefore to be capable of true knowledge. This redefinition of the subject as inherently and essentially rational dissolved the link which had bound together truth and ethics. No longer would knowledge be a function of the ascetic work which a self performed upon itself; it would henceforth be available to the self by the simple fact of its rationality. As Michel Foucault has pointed out, this implied a new way of relating to oneself and to the world.[29] Whereas Bacon had supposed an ascetic relationship to oneself to be necessary in order to get into a 'true' relation to the natural world, Descartes affirmed that it was sufficient only "that the relationship to the self reveals ... the obvious truth of what [one sees] for [one] to apprehend the truth definitively" (Foucault, "Ethics," *EW I* 279). This revelatory relationship to the self began with the recognition that one was "a substance the whole essence or nature of

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[29] Foucault, Michel. "On the Genealogy of Ethics: An Overview of Work in Progress." *Essential Works, Volume I: Ethics, Subjectivity and Truth.* Ed. Paul Rabinow. NY: The New Press, 1997. P. 279. Hereafter referred to parenthetically in the text as "Ethics."

which is to think"[30] – a 'discovery' that would relieve one from the burdensome and unnecessary work of transforming oneself in order to acquire the capacity of rationality, and from having to live in accord with a certain ethic ostensibly suited to the pursuit of truth. Moreover, precisely insofar as it did the latter, the discovery of one's rational essence or nature would change what it meant to be a knowing subject. For one thing, the knowledge of this subject would be exclusively cognitive, a matter not of wholesome living or altruistic motives but rather of the evidence that was present to it as a rational being, which is to say of the evidence that was presented to it by its rationality. And as we shall see, Descartes would in fact show that it was only by this evidence that the subject could be convinced beyond any doubt that its knowledge was true. But perhaps more important than this point is the conclusion to be drawn from it, namely, that Descartes' belief in the inherent rationality of the subject not only empowered but also obliged it to serve as the sole foundation of knowledge. To be a knowing subject was to be a foundational subject, the originating ground of one's own knowledge. Although Bacon had made gestures towards such a conception of subjectivity, notably when his opposition of rationality and history implied that rationality was properly understood as a faculty founded in the human mind, these gestures were confused and complicated by his subsequent association of rationality (ostensibly an intellectual faculty) with an ethical way of life. Descartes' articulation of an inherently rational mode of subjectivity may thus be read as an attempt to clarify and resolve just this issue. In the discussion that follows, we shall explore that attempt in detail, only to find that it is troubled by a paradox made familiar to us by Bacon: the recognition of one's inherent rationality can

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[30] Descartes, René. *Discourse on the Method of Rightly Conducting the Reason and Seeking for Truth in the Sciences.* In *Discourse on the Method and Meditations on First Philosophy.* Ed. David Weissman. New Haven & London: Yale UP, 1996. P. 21. Hereafter referred to parenthetically in the text as *DM.*

only come by way of a certain spiritual exercise or *askesis*, namely, the practice of meditation. As Foucault reminds us:

> We must not forget that Descartes wrote "meditations" – and meditations are a practice of the self. But the extraordinary thing in Descartes' texts is that he succeeded in substituting a subject as *founder* of practices of knowledge for a subject *constituted* through practices of the self ("Ethics," *EW I* 278).

This substitution of one mode of subjectivity for another inaugurated a radically new moment in the history of thought. For insofar as meditation 'revealed' the inherently rational nature of subjectivity, thereby granting it the capacity to act as the foundation of knowledge, it constituted a subject that paradoxically appeared not to require (nor perhaps even to admit of) constitution. That is to say that the particular form taken by this subject tended to hide the fact of its own genesis in an *ascetic* practice. Indeed, so effectively was the *ascetic* production of this subject concealed that its rationality could easily come to be taken as obvious and necessary, a fact of nature whose historical specificity and constructed-ness could be denied and forgotten. This 'fact' is moreover still very much with us, not only in most common-sense conceptions of rationality circulating today, but more profoundly within the traditions it inaugurated and the institutions it made possible. A recurrent theme and problematic of modern philosophy, and an essential condition of the possibility of modern science, the inherent rationality of the subject came to be regarded as the basis of any true knowledge of nature and the world. Because these traditions, the forms of knowledge they defined, and the institutions to which they were linked have played a seminal – or powerful – role in making us who we are, it is crucial to reconstruct the manner in which this 'fact' was established, and its dependence on a practice whose *ascetic* dimension cannot help but make it appear strangely irrational by the very standards that it sets up for rationality.

Let us begin by reminding ourselves of Descartes' project in the *Meditations*: to offer a demonstration of the existence of God and the distinction between mind and body.[31] At first glance unconnected to the themes announced above, these demonstrations were nevertheless what provided Descartes with the certainty that a true knowledge of nature and the world could be obtained. They did so by establishing the solid foundation from which that knowledge could be acquired: his indubitable existence as a thinking thing whose rational essence granted access to truth. This new foundation was sought due to his disappointment with the traditional means of gaining such access, the study of letters, which he had been assured would provide him with "a clear and certain knowledge ... of all that is useful in life" (*DM* 5). Upon the completion of his course of study, however, Descartes found that far from possessing this knowledge, he was "embarrassed with so many doubts and errors that it seemed to me that the effort to instruct myself had no effect other than the increasing discovery of my own ignorance" (*ibid.*). The fact that he could find "no single thing ... which [was] not subject of dispute" among the learned forced him to conclude that "there was no learning in the world such as I was formerly led to believe it to be" (*ibid.* 7, 5). After all, if that learning had demonstrated its certain knowledge, there would be no room for competing opinions, nor any reasons for argument. Because the truth of a matter was obviously singular,[32] Descartes felt compelled to view the multiplicity of conflicting accounts "regarding the

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[31] Descartes, René. *Meditations on First Philosophy*. In *Discourse on the Method and Meditations on First Philosophy*. Ed. David Weissman. New Haven & London: Yale UP, 1996. P. 58. Hereafter referred to parenthetically in the text as *MFP*.

[32] Descartes' belief in the singularity of truth (e.g. "there can never be more than one [opinion] which is true" (*DM* 7); "having but one truth to discover in respect to each matter" (*DM* 14)) would be echoed by Voltaire years later in a diatribe against the particularism of sects: "Sect and *error* are synonymous ... If one or the other had demonstrated the truth, there would be a sect no longer. To declare oneself for the opinion of one or the other is to take sides in a civil war. There are no sects in mathematics, in experimental physics." For Voltaire, truth, the kind of truth which mathematics and experimental physics disclosed, "is of all time, it is for all men, it has only to show itself to be recognized, and one cannot argue against it." Voltaire, Francois-Marie Arouet de. "Reflections on Religion." *The Portable Enlightenment Reader*. Ed. Isaac Kramnick. NY: Penguin Books, 1995. P. 127.

self-same matter" as evidence of a lack of knowledge, and to "[esteem] as well-nigh false all that only went as far as being probable" (Descartes, *DM* 7). An account that was only probable remained nothing more than an opinion; it may as well have been wrong for the distance that separated it from knowledge. However likely its explanation, such an account was ultimately uncertain and consequently open to doubt; by failing to resolve a question with finality, it admitted the possibility of error and left room for, or invited, disagreement.

It seemed quite clear to Descartes that the study of letters had not acquainted him with truth, and that it could not provide him with the foundation of certain knowledge that he required "in order to see clearly in my actions and to walk with confidence in this life" (*ibid.* 8). For one reason, because the learning contained in books was heterogeneous and composite, a patchwork of "gradually accumulated opinions of many different individuals" (*ibid.* 9-10). Therein, of course, lay the potential for disagreement and contradiction; but these were perhaps only the extreme cases of the general difficulty there was to bring about something satisfactory, let alone perfect, "in operating only upon the works of others" (*ibid.* 9). As his examples of architecture, town planning and legislation were intended to show, perfection was linked to the possibility of imposing a singular, individual vision in which everything "[conformed] to the uniformity of a rational scheme" (*ibid.* 10). The regularity and coherence possible in a work built from the ground up, and according to a single idea (or to the idea of a single author), were much more difficult to achieve in a work produced by renovating something old. To Descartes, these composite works implied a messy and confusing admixture of ideas and approaches. An author was never fully "free to follow his own ideas" (*ibid.* 9) but rather

was constrained by the pre-existing situation and the materials that it made available to him. Such situations demanded compromises that precluded the uniformity of a singular vision, and therefore resulted in works that ended up looking as though "chance rather than the will of men guided by reason ... led to such an arrangement" (*ibid.*).

There was yet another reason, however, that the study of letters did not provide a suitable foundation for knowledge. Much of the learning Descartes had found in books was based only upon probable reasoning and lacked the demonstrations that would have established its truth (*ibid.*). Similarly, the learning he had encountered in the Schools was a "speculative philosophy" – and not only with respect to its foundations (merely probable reasoning) but also to its practical application (*ibid.* 38). That is to say that it was not practical at all; its 'knowledge' was not "very useful in life" (*ibid.*). Of course, the impracticality of this learning was directly related to the fact that it was based solely upon "probable reasonings," and that its truth had not been established by demonstration, so it would be worthwhile to consider these shortcomings more closely. Nor should we rest at merely stating the obvious: that because it was largely unproven, this learning was no kind of knowledge at all. Although this of course is true, its flaws may be further clarified if we understand them in terms of their relation to the thinking subject. This allows us to see the problem with a type of learning that lacked demonstration as its inability to provide the subject with a personal experience of its truth. Without such an experience, the subject could not be certain and would not know whether its learning was true. It is from this perspective that Descartes would also criticize the study of letters for leading people to reason about matters that did not "specially concern" them (*ibid.* 8). It was not just that there was little at stake in such reasoning, which allowed people to take

liberties that otherwise they might not;[33] it was also, and perhaps more importantly, what this lack of consequence demonstrated: a certain distance between the thinker and the matters it thought about. The thinking subject had no personal connection to the academic matters it encountered in books or debated in schools; it had not had an experience of their truth. It was thus that they were merely probable and speculative: because they remained 'outside' the subjective experience that alone could grant them the status of being certain.

We have now outlined a few of Descartes' reasons for rejecting the study of letters as a foundation for knowledge. In so doing, we have also started to identify a number of characteristics that a well-founded rationality would exhibit. First and above all, it would seem necessary to be based upon reasoning that was carried out with respect to the things that were "immediately before" the thinking subject: its own experiences (*ibid.* 10). There was a much greater likelihood of achieving certainty and true knowledge regarding matters that were intimate and close to the self than regarding those which were detached and far removed from it. Rationality therefore had to be centered upon the experience of the thinking subject; only thus would it be well founded. From the satisfaction of this first condition, a number of beneficial effects would follow. Insofar as reasoning was to be conducted by an individual with respect to its own experience, it had no need of any other sources of learning. It would therefore avoid the imperfections that came of "operating ... upon the works of others," and of trying to reconcile one's own ideas with existing explanations. Because it would no longer be composed of the "gradually accumulated opinions of many different individuals," this

[33] As Descartes put it, such speculations "bring about no other consequences to [the thinker] excepting that he will be all the more vain the more they are removed from common sense, since in this case it proves him to have employed so much the more ingenuity and skill in trying to make them seem probable" (*DM* 8).

rationality could maintain the uniformity and coherence of a singular vision. And finally, because the knowledge attained by this kind of rationality would be certain and true, it would also be of far more practical value than previous learning. To be sure, it was initially (only) a self-knowledge that was acquired by such reasoning – but a self-knowledge of one's capacity for truth, and, perhaps more importantly, in what that capacity consisted, or how it was that one gained access to truth. The discovery that one's access to truth was a matter of the evidence that was present only to reason (as opposed, for example, to the imagination or the senses)[34] would thus pave the way for a new knowledge of nature and the world, a strictly cognitive knowledge whose certain truth would make it much more useful than previous learning. As Descartes put it, this would be a kind of knowledge

> By means of which, knowing the force and the action of fire, water, air, the stars, heavens and all other bodies that environ us, as distinctly as we know the different crafts of our artisans, we can in the same way employ them in all those uses to which they are adapted, and thus render ourselves the masters and possessors of nature (*ibid.* 38).

All signs thus seemed to point to the desirability of founding knowledge in the correctly applied reasoning of an individual subject, which appeared to be able to solve many of the problems Descartes had detected within academic learning. But this made it necessary to determine whether the rationality of the subject was in fact up to the challenge, and that it was indeed capable of producing the certainty that would mark the subject's attainment of true knowledge. For even if Descartes believed this to be the case (and there was little justification for such optimism), an undemonstrated belief, according to his own criteria, did not qualify as knowledge, and could not, therefore, provide or

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[34] "We should never allow ourselves to be persuaded excepting by the evidence of our Reason. And it must be remarked that I speak of our Reason and not of our imagination or our senses" (*DM* 25). We shall see examine the reflections that lead Descartes to this claim shortly.

function as the secure foundation from which to acquire scientific knowledge of nature and the world. If it was not known in the first place whether a subject could know anything with certainty, anything it presumed to know was liable to question and doubt. Conversely, knowing for certain that a subject had the capability of true knowledge guaranteed the possibility, at least, of attaining true knowledge in other areas. It was thus a crucial, indeed, the fundamental first step towards a scientific knowledge of nature and the world – fundamental in the sense that it would establish a secure foundation for knowledge in the subject's demonstrated capacity to attain truth.

In order to understand the procedure by which Descartes sought to determine whether the subject was capable of reaching truth in its reflections, we must recall two points. First, among the received opinions and beliefs he had formerly admitted as true, he perceived so many errors that the entire edifice of his knowledge was doubtful. Nor was it just the content of his knowledge that seemed dubious, but also, and more seriously, the principles upon which that knowledge had rested (*MFP* 59). The truth of those principles had never been investigated and personally experienced; they had simply been accepted on account of example and custom.[35] To this, the doubtfulness of received learning, we must add a second point: that certainty seemed much more likely to be attained by reasoning with respect to the experience of the subject. One must also assume that this reasoning could not draw upon pre-existing ideas to assist it in attaining knowledge of its experience. The latter, we now know, were entirely questionable; Descartes had to assume that nothing solid could be built "on foundations so far from firm" (*DM* 7). A kind of reasoning was thus required that would somehow allow the

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[35] See, e.g., *DM* 8, 10.

experience of the subject to speak for itself, hopefully that in and of itself (i.e. 'naturally') it might testify to being an experience of certainty. Now, in light of these two points – on the one hand, the unreliability of knowledge received from external sources; on the other, the need to ascertain whether the natural reasoning of a subject could produce certain knowledge – we begin to understand why Descartes chose what he called an "apparently opposite course," and instead of proceeding 'positively,' "[rejected] as absolutely false everything as to which I could imagine the least ground of doubt, in order to see if afterwards there remained anything in my belief that was entirely certain" (*ibid.* 21). By peeling away and sweeping aside received opinions and beliefs, this procedure would forge a return to a level of experience that was proper and essential to the thinking subject, an experience of 'pure' – that is, natural – reason.[36] We shall now examine the reflections by which Descartes accomplished this 'return' in some detail, in order to suggest that they were not so much responsible for returning an individual to its natural state of rationality as they were for producing a new kind of individual – an individual that understood itself as inherently and essentially rational, the proud owner of a 'natural' faculty of rationality whose use would grant access to truth and certain knowledge.

Let us begin by noting that the preceding remarks describe Descartes' method of doubt, whose specific utility, he suggested, consisted in its ability to deliver the meditating subject "from every kind of prejudice" or undemonstrated belief (*MFP* 55). The meditative application of doubt would rid the subject of all questionable ideas and learning, allowing only the absolutely certain to remain. Its delivery from the doubtful would thus, at the same time, be its delivery to an experience of certainty – indeed, such

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[36] As Descartes construed it: "the power of forming a good judgment and of distinguishing the true from the false, which is properly speaking what is called Good sense or Reason, is by nature equal in all men" (*DM* 3).

certainty that it would be "impossible for us ever to doubt those things which we have once discovered to be true" (*ibid.*). But these rewards of applying doubt did not exhaust its utility. For doubt did not just deliver over the subject to an experience of certainty and establish its knowledge; by doing so, it would also reveal what real certainty and knowledge consisted of, or from where they derived. Our discussion will show that Descartes located these in the clear and distinct judgments that were formed by reason (*intellectio*, the faculty of understanding). The judgments of reason were alone in being able to survive the relentless attrition of doubt; it was they that were "the most certain and evident facts which can fall within the cognizance of the human mind" (*ibid.* 58). This was perhaps the most important result of applying doubt, as it established reason as the sole foundation of certain knowledge, and the only means of gaining access to truth. And "established" not just in the weaker sense of *showing* reason to be the foundation of knowledge, but in the stronger one of actually bringing it about. In other words, doubt *instituted* reason as the foundation of knowledge. It did so by producing a subject for whom that was the case, a subject whose most certain knowledge was that which derived from the use of its reason. Indeed, to the precise extent that it constituted a subject *of knowledge*, doubt constituted a subject that was completely rational: "a substance the whole essence or nature of which is to think" (*DM* 21). We shall explore this process in detail momentarily; for now, let us make one final observation: doubt's disclosure of the fact that an individual's most certain and evident knowledge came by way of reason suggested that reason comprised the solid foundation that Descartes sought, the foundation required to establish a "firm and permanent structure in the sciences" (*MFP* 58-9). If the sciences were ever to produce real knowledge, a knowledge that would

stand the test of time, they would have to take account of what it meant to actually know something with certainty, which is to say that they would have to be founded in the rationality that granted an individual the capacity of true knowledge.

The first step of the procedure that would accomplish these vital tasks consisted of a meditation on "the things which may be brought within the sphere of the doubtful" (*ibid.* 58). This would allow Descartes to discover which of his opinions and beliefs were less than entirely certain and had to be rejected as unreliable, as impossible to consider real knowledge. But assessing each of these individually was a daunting and perhaps interminable undertaking; it seemed far more productive to examine the principles "upon which all my former opinions rested" (*ibid.* 59). For if those principles were themselves found dubious, all that rested upon them could be instantly ruled out: "the destruction of the foundations [necessarily] brings with it the downfall of the rest of the edifice" (*ibid.*). Thus would Descartes proceed directly to an examination of the fundamental principle underlying so much of his learning: the belief that sense-perception was at the basis of what was "most true and certain" (*ibid.*). The senses appeared to offer a privileged mode of access to the world, a mode of access that allowed and resulted in sure knowledge. This privileged status seemed to be corroborated by the difficulty of doubting the evidence they provided: the senses permitted things "to be met with" in such a way that "we cannot reasonably have any doubt" (*ibid.*). But a moment of further reflection revealed that this was not always the case: the senses sometimes deceived and provided erroneous information, as in the cases, for example, of "things which are hardly perceptible, or very far away" (*ibid.*). However strong the impression of certainty they granted with respect to what was near and close, the senses were clearly not infallible,

and could not be relied upon to provide a consistently accurate knowledge of the world. As such, they had to be ruled out as the foundation that Descartes sought. But this was easier said than done. Although the wise and prudent course of action was "not to trust entirely to any thing by which we have once been deceived" (*ibid.*), it was quite difficult in practice to disregard and discard the evidence of the senses. Indeed, there were many occasions on which it seemed quite unreasonable to do so: "For example, there is the fact that I am here, seated by the fire, attired in a dressing gown, having this paper in my hands and other similar matters. And how could I deny that these hands and this body are mine..." (*ibid.*). Even though Descartes recognized that his knowledge of these things derived from an unreliable source, and that he ought, therefore, to withhold his assent from them, he could not; the grasp of sense-perception upon his mind – the feeling that it would be irrational to doubt what the senses told him – was too strong. Some device was therefore required that would loosen this grasp and allow doubts to be raised with respect even to the seemingly indubitable facts of his present circumstances. Only thus would Descartes be able to proceed beyond sense-perception and find out whether there was anything more certain than the certainty granted by the senses (which applied only to a limited range of experience). Moreover, if the course of reflections enabled by this 'device' were to have any chance of reaching truth, it not only had to allow Descartes to doubt his perceptions of what was near and close; it had to do this, more specifically, while still maintaining him within the limits of what was reasonable. Only thus would he be qualified to claim that his course of reflections had attained truth. As we will now see, however, this stipulation would mean that philosophical reflection took place within a field that was defined in advance as a domain of Reason, a field defined, in other words,

by its prior exclusion of irrationality. A rather curious and troubling gesture for a philosopher whose entire aim was to deliver himself "from every kind of prejudice" and preconceived idea, so let us continue our examination of the reflections that produced it.

To recap: in his drive to acquire absolute certainty, Descartes had reached a point where he knew that he should doubt the evidence provided by his senses, but could not. Knowledge of the prudent course of action was not enough; something further was required, some device that would loosen the grip that sense-perception maintained upon his mind. As Foucault would argue in his remarkable essay on Descartes' first meditation, this "loosening" would necessarily involve a practical modification of the subject, which had to be transformed in its very being if it were to be able to convert "a counsel of prudence [with respect to what his senses told him about his present circumstances] into effective doubt."[37] Thus, of course, the necessity of interpreting the *Meditations* not simply as a philosophical argument proceeding according to the order of a demonstration, but also as a group of practical exercises that modified the subject, produced in it new states, and conferred upon it a new status and qualification – that is, as a discourse belonging to the order of an *askesis* ("My Body," *HM* 562-3). It is within this order, suggests Foucault, that we must understand the two hypotheses Descartes proposed – not just as reasons to doubt the evidence of the senses, then, but as practical devices, discursive events that modified the subject and constituted it as effectively doubting. The first, a hypothesis of madness:

> And how could I deny that these hands and this body are mine, were it not perhaps that I compare myself to certain persons, devoid of sense, whose cerebella are so troubled and clouded by the violent vapors of black bile, that they constantly assure us that they think they are kings when they are really quite poor, or that they are

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[37] Foucault, Michel. "My Body, This Paper, This Fire." *History of Madness*. London & NY: Routledge, 2006. P. 564. Hereafter referred to parenthetically in the text as "My Body."

> clothed in purple when they are really without covering, or who imagine that they have an earthenware head or are nothing but pumpkins or are made of glass (*MFP* 59).

Everything that appeared to comprise the present circumstances of his meditation would seem to be rendered doubtful if Descartes supposed himself to be mad. The mad were "entirely deluded," as Foucault put it, "about what constitutes their actuality" ("My Body," *HM* 566), which is to say that they were completely convinced of something that was false, of the reality of an illusion. The meditative hypothesis of his own madness would therefore mean that Descartes' perceptions were doubtful even at their most certain. Nonetheless, despite its apparent efficacy, the hypothesis is immediately rejected as the device that Descartes sought: "But they are mad, and I should not be any the less insane were I to follow examples so extravagant" (Descartes, *MFP* 59). The hypothesis of madness is ruled out as the device whose use would allow the meditating subject to effectively constitute itself as doubting – and without even being tested; indeed, the very idea of testing it (by imitating or likening oneself to the insane) is claimed to be madness. Why?

One answer to this question would begin with Foucault's observation that madness for Descartes was a matter of being "entirely deluded" with respect to the constitution of one's actuality. The mad were completely convinced of the reality of illusions, of something false. Here, we must notice and emphasize the entirety of their delusion, the completeness of their conviction. It suggests that madness was not just a matter of wrong belief, but also of complete belief. That is to say, madness was characterized by an inability to doubt the perceptions that one took as one's actuality. As Foucault points out, "the madman wrongly believes that his body is made of glass, but

does not consider himself to be believing it wrongly" ("My Body," *HM* 572). Madness didn't free one from assent to one's perceptions; it bound one to them all the more tightly. The hypothesis of madness would not allow one to constitute oneself as a doubting subject; it could not function as the device Descartes sought. Indeed, to use it that way (by assuming that everything one perceived might be a delusion produced by madness) was to retain precisely the self-awareness and control over one's assent that were lacking in the mad; it was to behave, in other words, as though one were rational. Nor could one do any differently, if one wanted the meditation to continue. To take the hypothesis seriously was to bring meditation, as a practice of self-examination through which one assessed the validity of one's opinions, to a close. Such was forbidden to the madman, who, it seemed, helplessly "[assented] to them all" (*ibid.* 572).

It is Foucault's great virtue to have pointed out in his *History of Madness* that the incompatibility between meditation and madness in the Cartesian discourse was but one manifestation of a broad restructuring of the relation between reason and madness that took place in the Classical Age. Madness, quite simply, no longer inhabited the same domain as the thinking subject, "the domain where the thinking subject holds rights over truth"; it had been "placed in a zone of exclusion" where it posed no threat "to the link between subjectivity and truth."[38] It is in this context that we must understand what Descartes regarded as the madman's inability to meditate effectively: as an effect of the way madness was believed to exclude one from the domain where meditation took place, the domain of Reason. As Foucault puts it, madness was "a condition of impossibility for thought" (*ibid.* 45). This sheds further light on Descartes' unwillingness to countenance

[38] Foucault, Michel. *History of Madness*. London & NY: Routledge, 2006. P. 46.

the possibility of madness. For one reason, because it would have logically contradicted the fact of his meditation, which, as an "exercise [of thought] carried out by a subject seeking the truth, [could not] be devoid of reason" (*ibid.* 47). The simple fact that he was thinking, that he sought truth by critically assessing his opinions, meant that he could not be considered insane; inherent in the thinking subject was "an impossibility of being mad" (*ibid.* 45).

Of course, it could be objected that this was a fairly weak reason to dismiss the hypothesis, which had the remarkable power to 'contaminate' the discourse of rationality that would ostensibly have contained it. Such a hypothesis, in other words, could make the apparent "fact" of his meditation nothing more than a delusion produced by madness. Indeed, this was precisely why the hypothesis of madness was considered in the first place: for its power to render the seemingly incontrovertible facts of his present circumstances dubious. The problem with this 'solution' to the intransigence of his perception – and by far the more important reason to eliminate it – was that it also disqualified him as a rational subject; it threw out the baby along with the bathwater, so to speak, by excluding him from the domain of reason that granted access to truth. An admission of the possibility of madness would thus invalidate Descartes' entire enterprise; no longer could he be assured of its "reasonable character," and no longer would he be able to attribute any value to its results ("My Body," *HM* 565). At stake in the refusal of madness, then, as Foucault argues in his essay, was the maintenance of the subject's qualification to think, to reason clearly, and to claim that it had attained truth (*ibid.* 558-60). This is clear, suggests Foucault, when one considers the terms that Descartes used to characterize the mad in the original Latin version of the *Meditations*.

Their differences reveal crucial distinctions of meaning that are lost in the English and French translations. The first reference we find in English is to "certain persons, devoid of sense." This is the phrase chosen to translate the Latin word "*insani*," which, as Foucault describes it, is "a term of characterization" that "belongs as much to everyday vocabulary as it does to medical terminology," a term that "refers to signs" (*ibid.* 559). The second and third references in English appear later in the same paragraph, where we read: "But they are mad, and I should not be any the less insane were I to follow examples so extravagant." The "mad" and "insane" of this sentence no longer translate "*insani*," however, but "*amentes*" and "*demens*,"

> Terms that are legal before being medical, and which designate a whole category of people who are incapable of certain religious, civil and legal acts; the *dementes* do not have all their rights in matters of speaking, promising, committing themselves, signing, bringing legal actions, etc (*ibid.*).

Foucault reminds us that when this juridical terminology appears in Descartes' discourse, it is no longer a question of characterizing madness by its signs but rather of "[affirming] that I should not take my example from the mad" (*ibid.*): "I should not be any the less insane [*demens*] were I to follow examples so extravagant." The *insani* (persons "devoid of sense") were *amentes*, unqualified to perform such actions as required an ability to distinguish true from false. To compare oneself to these *insani* who were *amentes* would make one no less *demens*, similarly and automatically disqualified from being able to claim the status of truth for one's discourse. The cost of using this hypothesis was therefore too great. It would render one's actuality doubtful, to be sure – although not for oneself, who would be completely convinced of its reality (or else not mad). But if one wanted to cheat by ignoring that little detail, and pretend that one was mad in order to doubt what one took as one's actuality (thus behaving quite rationally), one would still

find oneself excommunicated from the domain that qualified and validated one's truth claims. After all, one would have rendered one's actuality 'doubtful' only by assuming that one was unable to distinguish (true) reality from (false) illusion. Forget that this inability would leave one without criteria and capacity for doubt: any insights that this hypothetical assumption *might* provide would also be quite worthless – or worth no more, at any rate, than the ranting of a madman.

In the interest of avoiding these obstacles to valid meditation, a second hypothesis was proposed: that the actuality which seemed so certain and difficult to doubt was nothing more than a dream experienced in sleep. A brief consideration of this regularly undergone experience suggested that the dream, as much or even more so than madness, had the power to deceive the dreamer with respect to the constitution of his actuality:

> At the same time I must remember that I am a man, and that consequently I am in the habit of sleeping, and in my dreams representing to myself the same things or sometimes even less probable things, than do those who are insane in their waking moments (Descartes, *MFP* 60).

It was undeniable, then, that at the level of its concept, the dream had the ability to render dubious the perception of one's actuality. But so too, at that level, had madness. The question was whether the hypothesis of the dream could function any better at an *ascetic* level, as a practical device through which the meditating subject would be constituted as effectively doubting its sensory perception. Let us take up the question by returning to Descartes' text:

> How often has it happened to me that in the night I dreamt that I found myself in this particular place, that I was dressed and seated near the fire, whilst in reality I was lying undressed in bed (*ibid.*)!

One should take note of the contrast between this passage and the earlier passage on madness. Whereas madness was an "exterior term" to which Descartes would have to

compare himself, dreaming was an experience he regularly underwent, a "frequently actualized" virtual state that was readily accessible to memory (Foucault, "My Body," *HM* 556, 566). As Foucault points out, this accessibility would be crucial to its ability to function as part of a practical exercise carried out by the meditating subject (*ibid.* 553). It gave dreaming a decisive advantage over madness:

> It is frequent, it often happens; I have recent memories of it, and it is not difficult to draw on the extremely vivid memories it leaves. A practical advantage, in short, when what is at stake is no longer demonstrating, but carrying out an exercise and calling up a memory, a thought, a state, in the very movement of meditation (*ibid.*).

We shall consider how this exercise of recalling the experience of dreaming would take practical effect in the meditating subject momentarily; for now, let us mention one further contrast between the passage on dreams and that on madness. For all their power to derange the senses, a power that rivaled or perhaps exceeded that of madness, what is remembered and noted of dreams is their reproduction of the quite ordinary circumstances comprising the actuality of Descartes' meditation: "How often has it happened to me that in the night I dreamt that I found myself in this particular place, that I was dressed and seated near the fire, whilst in reality I was lying undressed in bed." In contrast, madness, whose power to generate improbable scenarios was probably less than dreams, is characterized precisely by the wildness of the delusions to which it led: taking oneself for a king when one was poor, believing oneself clothed in purple when one was naked, and so on. The examples chosen to characterize it thus told a quite different story than that of its near equivalence with dreams. While dreams produced "demonstratives that point towards the scene where I am," madness was when "all is other, it deforms and transports, it evokes a different scene" (*ibid.* 556). This characterization of madness as a generator of wild delusions meant that it didn't really have to be tested within the

meditation as a serious possibility; it took the place, in fact, of a practical test. The logic seemed to be this: "Madness transports one to a different scene; I have not been transported; I am not mad." If madness were to have had a fair shot, the possibility would have had to be raised, and the implications traced out, that in his madness he only imagined himself to be meditating in front of a fire. But a preconceived idea of what madness was, of the effects it took, and of the signs by which it could be recognized – this unfounded 'knowledge' of madness meant that such a test would not be required – indeed, that it was insane to contemplate – and that its exclusion from the discourse was justified. Of course, these explicit reasons for its exclusion only concealed that which we already suggested was the real reason to rule out madness: the fact that it disqualified the subject from valid meditation.

Just as the multiple examples used to characterize madness helped to eliminate it from consideration for a role in meditation, the single example Descartes provided to illustrate the power of dreaming suggested its eminent suitability for the same. His recurrent dream of finding himself "in this particular place ... dressed and seated near the fire" meant that the dream was compatible with what appeared to be the actuality of his meditation in a way that madness was not. It could be incorporated within his meditation without contradiction of the circumstances in which that meditation appeared to be taking place. This compatibility, like the familiarity that derived from its frequency, was crucial to the ascetic efficacy of the dream. It allowed the dream to *take effect* in the subject that meditated upon it (*ibid.* 554), moving the subject from the initial certainty that he was awake, to a state of such astonishment at the lack of "certain indications by which we may clearly distinguish wakefulness from sleep" that it was "almost capable of

persuading me that I now dream" (Descartes, *MFP* 60). By remembering a dream that precisely reproduced what he presently perceived as his actuality, Descartes induced in himself the uncertainty whether he was awake and meditating or asleep and dreaming. As Foucault points out, thinking of dreaming was such, "when one applies oneself to it, that its effect is to scramble for the meditating subject, and at the very heart of his meditation, the perceived limits of sleeping and wakefulness. The dream *troubles the subject* who thinks about it" ("My Body," *HM* 554). There was no similar effect from thinking about madness, which was instead merely to catalog the signs by which it was recognized, and thereby to realize its obvious exteriority to the subject, an exteriority which left it unable to affect or modify him within the meditation.

These, then, were the practical advantages that the dream had over madness: it was not only familiar to the meditating subject, a frequent experience that the subject could easily recall for himself; its regular reduplication of what he presently took for his actuality allowed the act of recalling these familiar experiences to modify the subject, producing a new state of uncertainty whether he was awake or dreaming. This practical modification of the subject loosened the grip that sense-perception maintained upon his mind and constituted him as effectively doubting his actuality. It was eminently possible that the clear and distinct perception he had of meditating in front of the fire was nothing but a dream, and that he was in reality lying undressed in bed. The impossibility of knowing which of these was the case was in effect to doubt the perception one had of a certain actuality. But perhaps even more important than the facility with which dreaming could be incorporated into meditation, and even more important than its practical efficacy, was the fact that the hypothesis of the dream retained the subject's ability and

qualification to meditate validly. For even if the subject was entirely deceived with respect to the constitution of its actuality, even if he assumed "that we are asleep and that all these particulars, e.g. that we open our eyes, shake our head, extend our hands, and so on, are but false delusions; and let us reflect that possibly neither our hands nor our whole body are such as they appear to us to be"; even if all this was admitted, he was not prevented from being able to see something quite clearly: "At the same time we must at least confess..." (Descartes, *MFP* 60). His words mark the continuation of his meditation, and demonstrate its ability to produce valid insights even after the hypothesis of dreaming had placed his actuality in doubt.

It is perhaps fitting, after this, that the first of these insights was precisely the realization that dreams preserved a relation to truth. However "strange and extraordinary" were their images, "the things which are represented to us in sleep are like painted representations which can only have been formed as the counterparts of something real and true" (*ibid.*). Even if the totality of one's perceptions were false, they "represented" something true; there was something valuable to be learned from them, something that might be known. Was it not, perhaps, that there really existed general classes of things in the world, things like "eyes, a head, hands, and a whole body" (*ibid.*), things whose real existence seemed to be a condition of possibility for one's perceptions of them, even if those perceptions were false? Although likely, it was not certain, and could not be taken as knowledge. For if, as Descartes noted, dreams were like painted representations, could they not be like the works of those painters whose "imagination is extravagant enough to invent something so novel that nothing similar has ever before been seen" (*ibid.*)? Could they not, in other words, represent things that were "purely

fictitious and absolutely false" (*ibid.*)? Indeed it was possible that they did; even if one extended to the objects they represented the leeway of being "general," their real existence could be doubted. To this, Descartes responded by saying that even if one admitted this doubt, as one had to, "it is certain all the same that the colors of which [these things are] composed are necessarily real." And similarly,

> Although these general things ... may be imaginary, we are bound at the same time to confess that there are at least some other objects yet more simple and more universal, which are real and true; and of these just in the same way as with certain real colors, all these images of things which dwell in our thoughts, whether true and real or false and fantastic, are formed (*ibid.*).

Thus, one could suppose that one were dreaming, and admit that the totality of one's perceptions were false, and discover as one meditated that even those completely false perceptions had something true about them, namely, the attributes they bore, the colors and other necessary properties of the corporeal nature that they "represented." These more simple and more universal "objects" included "extension, the figure of extended things, their quantity or magnitude and number, as also the place in which they are, the time which measures their duration, and so on" (*ibid.* 60-1). Such properties seemed necessary to the existence of any physical object; but there need not have existed any such object in reality for such properties to be studied and known. This was crucial: it implied that one could acquire knowledge, a certain knowledge, even if the totality of one's perceptions were false – indeed, even if there were no such objects corresponding to one's perceptions. It therefore seemed fair to conclude

> That Physics, Astronomy, Medicine and all other sciences which have as their end the consideration of composite things, are very dubious and uncertain; but that Arithmetic, Geometry and other sciences of that kind which only treat of things that are very simple and very general, without taking great trouble to ascertain whether they are actually existent or not, contain some measure of certainty and an element of the indubitable (*ibid.* 61).

Perhaps, then, these sciences could provide the certain knowledge Descartes sought. For as he noted, "whether I am awake or asleep, [arithmetic shows that] two and three together always form five, and [geometry demonstrates that] the square can never have more than four sides" (*ibid.*). These were truths "so clear and apparent" that it did not seem possible to suspect them "of any falsity [or uncertainty]" (*ibid.*).

Yet this was precisely what Descartes would do in the next stage of his meditation, by asking how he knew he was not deceived every time he added two and three, or counted the sides of a square. Or, for that matter, how he knew that God had not brought it to pass "that there is no earth, no heaven, no extended body, no magnitude, no place, and that nevertheless [I possess the perceptions of all these things and that] they seem to me to exist just exactly as I see them" (*ibid.*)? Although these increasingly strange possibilities seemed to fly in the face of a belief in a supremely good God, who surely would not have made Descartes "such that I constantly deceive myself," so too, as he pointed out, did the fact that he was *sometimes* deceived, "and nevertheless I cannot doubt that He does permit this" (*ibid.*). His reflections described an improbable scenario, to be sure – but improbable was not the same as impossible. However unlikely, it was just possible enough that he could no longer be absolutely certain that sciences such as mathematics and geometry, which treated only of the "very simple and very general," ever attained truth or resulted in knowledge. He might always be deceived with respect to that which they took as their objects.

The conclusion was a simple one, and, at this stage in our presentation, to be expected. Just like knowledge that derived from the senses, the knowledge of these more 'abstract' sciences had to be considered dubious, and disregarded for something more

certain. But again, just like knowledge that derived from the senses, there was an obstacle to so doing, namely, the "long and familiar custom" that gave his "ancient and commonly held opinions ... the right to occupy my mind against my inclination and rendered them almost masters of my belief" (*ibid.* 62). We should recall the structure of the argument proposed earlier. Knowledge of the prudent course of action was not enough to constitute himself as a doubting subject; something further was required, a device that would effect a practical modification in him such that the grip of "long and familiar custom" was loosened. For as Descartes put it: "it is not sufficient to have made these remarks, we must also be careful to keep them in mind" (*ibid.*). To "keep them in mind," however, required more than just an effort to remember that his opinions were "in some measure doubtful"; such efforts could not for long compete against force of habit, and the tendency to consider his opinions "at the same time [as being "in some measure doubtful"] highly probable" (*ibid.*). It required, in other words, a practical exercise through which he would train himself out of these habits, replacing old with new. This practical exercise would avail itself of a new and yet more radical hypothesis that would be employed until such time as "my judgment will no longer be dominated by bad usage or turned away from the right knowledge of the truth" (*ibid.*). This hypothesis was one of complete deception by "some evil genius not less powerful than deceitful":

> I shall consider that the heavens, the earth, colors, figures, sound, and all other external things are nought but the illusions and dreams of which this evil genius has availed himself in order to lay traps for my credulity; I shall consider myself as having no hands, no eyes, no flesh, no blood, nor any senses, yet falsely believing myself to possess all these things (*ibid.*).

Like the hypothesis of the dream, this hypothesis of an evil genius allowed Descartes to constitute himself as an effectively doubting subject. It extended and deepened the

operation of the earlier hypothesis, freeing him from assent to all the opinions that he had formerly accepted as being knowledge – the propositions of mathematics and geometry among them. Even if it didn't allow him to arrive at a knowledge of any truth, so long as he remained "obstinately attached" to the idea of his deception, "I may at least do what is in my power [i.e. suspend my judgment], and with firm purpose avoid giving credence to any false thing" (*ibid.*). The practice of imagining himself completely deceived allowed him to avoid deception in reality; everything was admitted as false so that no falsity would be admitted. As Foucault takes pains to remind us, it was therefore rigorously opposed to madness, which, if it manifested similar kinds of deception, positioned the subject very differently in relation to its deception. The madman's inability to distinguish true from false situated him in a position of such interiority with respect to his delusions that he was unable to appreciate that he was even deceived. In contrast, the patsy of an evil genius still possessed enough sense to know that what he experienced as reality ought to be doubted; he was able to distance himself from his experience, rationally reflect upon it, and refrain from giving assent to it (or to its truth). Thus, as Foucault explains, "in madness *I believe* that an illusory robe covers my nudity and my poverty, whereas the hypothesis of the evil genius allows *me not to believe* that this body and these hands exist" ("My Body," *HM* 572). Madness brought doubt to a halt; the evil genius allowed it to continue. If indeed the evil genius "took over" madness' power of derangement, it was "only after the exercise of the meditation [had already] excluded the risk of [actually] *being mad*" (*ibid.* 572).

These remarks undoubtedly raise an important question. What did this admittedly hyperbolic radicalization of doubt achieve? Or, perhaps better, did it allow anything to

be salvaged? For if it awoke him from the "agreeable illusions" of his former opinions (Descartes, *MFP* 62-3), it seemed to leave nothing in their stead; he was no longer deceived, but neither did he possess anything he could regard as certain knowledge. At the start of his second meditation, he described the experience in terms of a sudden fall into very deep water: "I am so disconcerted that I can neither make certain of setting my feet on the bottom, nor can I swim and support myself on the surface" (*ibid.* 63). The decision was therefore made to start again, to repeat the exercise of the first meditation until something certain had been found – or at least, until he had learned for certain that no such thing existed (*ibid.*). This decision should remind us of the ascetic dimension of meditation, which required repetition and practice in order to realize its full potential in the subject. Repetition of the exercise would make it more familiar; with practice, it would be easier to set aside the opinions that had been so tenacious. He would no longer have to devote so much effort to their upheaval, and could therefore meditate further and more effectively on what remained in their absence. Thus his quick rehearsal of an exercise that took an entire day the first time around:

> I suppose, then, that all the things I see are false; I persuade myself that nothing has ever existed of all that my fallacious memory represents to me. I consider that I possess no senses; I imagine that body, figure, extension, movement and place are but the fictions of my mind. What, then, can be esteemed as true (*ibid.*)?

His answer to this question is, of course, the famous assertion of his own existence as a thinking thing. For even if he supposed that there was no heaven or earth, or that he had no senses, nor any body, the fact that he supposed something at all meant that his existence was certain: "of a surety I myself did exist since I persuaded myself of something [or merely because I thought of something]" (*ibid.* 64). The same reasoning was extended to his deception by an evil genius: in order for Descartes to be deceived, it

was necessary that he exist. "Without doubt I exist also if he deceives me, and let him deceive me as much as he will, he can never cause me to be nothing so long as I think that I am something [i.e. deceived]" (*ibid.*). The conclusion was clear: "I am, I exist, is necessarily true each time that I pronounce it, or that I mentally conceive it" (*ibid.*). Here, finally, was bedrock, a truth immune to doubts.

Let us consider the nature of this truth more closely. For one thing, it was neither derived from nor contingent upon his experience as an embodied being. Indeed, as we now know, it had been attained only after laborious efforts to disengage himself from that experience, whose predominantly sensory mode of access to the world, although known to be unreliable, had nevertheless had an immediacy that made it difficult to doubt. His efforts to overcome the immediacy of sense perception had required and produced a series of profound modifications in his subjectivity, allowing doubts to be raised regarding the actuality of fundamental aspects of his experience, embodiment and sense perception chief among them. These were detached and discarded as uncertain and inessential to his experience as a meditating subject who sought the truth. What such efforts could not put in question, however, was the existence of the "I" who engaged in them – indeed, they only confirmed it, and thereby disclosed that what was essential to the existence of this "I" was the activity of thought itself. It was only when he was thinking that Descartes knew beyond any doubt that he existed; nothing else could be admitted as certain: "it might possibly be the case if I ceased entirely to think, that I should likewise cease altogether to exist. I do not now admit anything which is not necessarily true" (*ibid.* 65). His constitution as a knowing subject was thus, at the same time, his constitution as a thinking substance: that which he *knew* himself to be was "not

more than a thing which thinks, that is to say a mind or a soul, or an understanding, or a reason" (*ibid.*).

On the face of it, these 'discoveries' would not appear to have had much to offer the project of attaining a scientific knowledge of the world. They seemed only to testify to the sure existence of the meditating subject. But let us consider that in so doing, they had provided an experience of certainty, and made it clear that reason was responsible for providing or producing that experience. It was insofar as he was thinking or exercising his reason that Descartes had been able to acquire sure knowledge. His bodily existence and sensory perception had been strangely irrelevant, and perhaps even hindered the task. The sciences needed to take account of these facts, and henceforth be founded in the methodical application of reason. This would allow them to know their objects strictly in terms of the rational evidence for their truth. Such evidence had nothing to do with the senses, nor even with a discipline that would keep them close to nature; it was rather a function of the clarity and distinctness of the conceptions it was possible to form of an object in an *intellectual* process, in an act or activity of thought. The broad implementation of this new foundation would have momentous consequences for the modern world. On the one hand, it would allow the sciences to attain a new kind of mastery over a disenchanted world of extended objects. On the other hand, it would come to define the encounter between Self and Other strictly in terms of knowledge, which is to say as an encounter between a purely rational thinking subject and the (possible or actual) objects of its narrowly intellectual knowledge. The specificity of this kind of knowledge greatly enhanced the manipulability of objects, not just from a 'practical' perspective, but also from an 'ethical' one, precisely by its disconnection from

any particular ethical view. In it, objects would be known 'clinically,' as arrangements and agglomerations of a meaningless extended substance – and nothing more. These developments marked a fundamental shift in the experience of one's Self and Others, a transformation in the mode of being of subjects and objects of knowledge. Nor was this shift necessarily of the order of an advance. For what we now take as only natural and correct marked the end, indeed, the loss of other modes of being, of other experiences of the world, of other ways to apprehend one's Self and one's Others. Here, Descartes' treatment of madness provides the crucial example. The experience that it represented was placed off limits for its incompatibility with reason. In it, different rules (or no rules?) applied; its foreign logic could not possibly lead to truth – at least, to the particular kind of truth sought (exactly!) by a reasonable person. Instead of being tolerated as an alternative, however, or as one possible experience among many, it was simply defined as pathological and excluded from validity. It would henceforth exist only as an object of reason's knowledge, as a collection of signs and symptoms that could be described, and whose bodily causes could be isolated and understood. Thus would a highly specific, historically articulated kind of thought secure its hegemony as the sole 'reasonable' kind: by 'understanding' as an illness, and thereby reducing to its own terms, the only experience that would have given the lie to its claims to universality and natural necessity.

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