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The Implications of Merleau-Ponty for the Human Sciences

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Preface

In 1959, C.P. Snow (1905-1980) addressed a growing problem in the academic world. Even though many intellectuals in his time came from similar social backgrounds, were comparable in intelligence, and made roughly the same incomes, he noted a schism between the two groups of intellectuals. There was, on one hand, a community of scientists and, on the other hand, a community of literary intellectuals. These "two cultures" had their own intellectual, moral and psychological atmospheres that resulted in distinct attitudes, standards, patterns of behavior, approaches, and assumptions for both groups. As result of the differences, these intellectuals had almost ceased to communicate with each other at all.[1] Scientists were disinterested with Shakespeare in equal proportion to those literary intellectuals who were unversed in the laws of thermodynamics; each culture was distinct in both method and rationality from the other. For Snow, both sides became self-impoverished through this segregation. The literary intellectuals were concerned that scientists were quickly becoming illiterate and, vice versa, the scientists accused the literary intellectuals of innumeracy. Consequentially, the greater Western cultural horizon was denied possible intellectual breakthroughs because these two camps could not work together. [2]

The human sciences, in particular, were a battleground of academic cultural warfare. Only one year after C.P. Snow's "Two Cultures" lecture, Maurice Merleau-Ponty (1908-1961) released a compilation of his essays called *Signs*. In an essay entitled "The Philosopher and Sociology," Merleau-Ponty began by reaffirming Snow's observation:[3]

1 Snow, C.P.. "The Rede Lecture, 1959." *The Two Cultures: And a Second Look*. London, England: Cambridge University Press, 1959. Print. 169

2 Snow 172

3 Maurice Merleau-Ponty. "The Philosopher and Sociology." *Signs*. Trans. Richard C. McCleary. Evanston, Illinois: Northwestern University Press, 1964. Print. 98

> Philosophy and sociology have long lived under a segregated system which has succeeded in concealing their rivalry only by refusing them any meeting-ground, impeding their growth, making them incomprehensible to one another, and thus place culture in a situation of permanent crisis.

The thrust of Merleau-Ponty's argument in "The Philosopher and Sociology" is that the study of society cannot remain an exclusive cultural acquisition of the scientist; philosophy, despite being a family member of the humanities, has much to say about the study of culture. The broad aim of this paper is to show both why and how the two cultures should be united. This will be no easy task: the culture of science, after all, is deeply entrenched into our natural attitude. An analysis of our cultural history, its twists and turns, will illuminate our cultural present.

In November of 2010, the American Anthropological Association (AAA) made revisions to its long-range plan. These changes have been highly controversial in the anthropology community because the new long-range plan omits any mention of the word 'science.' As a result of the change, a rift within the community has become apparent. There are anthropologists who disagree with the changes to the long-range plan and consider their research under the banner of science. They believe that the omission of 'science' from the long-range plan is an abandonment of the core principles of the association. The changes have been welcomed by a few, however, who envision a more inclusive anthropology that takes other knowledge systems into account – including the rationality of the humanities.

The long-range plan is a mutable document that establishes the long term goals of the association. The long-range plan before 2010 made it clear that the "purposes of the Association shall be *to advance anthropology as the science* that studies humankind in all its aspects, through archaeological, biological, ethnological, and linguistic research."[4] After the changes in

4 "Long-Range Plan." American Anthropological Association. 23 Nov. 2010. Web. Footnote continues...

late 2010, however, the long-range plan makes no mention of advancing anthropology as a science. The edited long-range plan states that the purpose of the association "shall be to advance the public understanding of humankind in all its aspects."[5] The changes imply a shift in focus; the new long-range plan does not specify the goal of anthropology as the generation of knowledge. Instead, the changes are more supportive of anthropology as a medium for advocacy. Even the research domains that were listed in the older long-range plan have been scrutinized and transformed. The long-range plan goes on to cite new domains of anthropological research including "social, cultural, political, historical, medical, and visual" research.[6] The AAA argues for the changes by affirming that, in order to understand the complexity of cultures across history, anthropology "draws and builds upon knowledge from the social and biological science as well as the humanities and physical sciences."[7] Ethnology, in particular, is absent from the amended long-range plan and its subject matter has been fragmented into more general categories of humanistic study. These transformation of traditional anthropological topics from scientific pursuits to more general studies, some argue, is tantamount to the destruction of anthropology altogether. Carl Lipo, a professor of anthropology at California State University asserts that the changes to the long-range plan "basically makes it necessary for those who believe that there are ways of generating theory-laden falsifiable accounts of the world in terms of culture…must work under a different banner than anthropology."[8] Professor Lipo's assertion is supported by Stu Plattner, the former director of the Cultural Anthropology Program of the

The current version can be found at <http://aaanet.org/about/Governance/Long_range_plan.cfm >.
A version of the LRP with the additions underlined and the deletions in strikethrough can be found at <http://www.unl.edu/rhames/AAA/AAA-LRP.pdf >.

5 Ibid.

6 Ibid.

7 "What is Anthropology?" American Anthropological Association. Dec 2010. Web. <http://aaanet.org/about/WhatisAnthropology.cfm >

8 Carl Lipo. "Whither Anthropology as a Science?" *Evolution Beach Blog*. 26 Nov. 2010. Web. <http://www.evobeach.com/2010/11/whither-anthropology-as-science.html>

National Science Foundation. He argues that the changes are “another step in the conversion of anthropology from a social science into an esoteric branch of journalism.”[9]

The controversy over the change to the long-range plan hinges on the importance of scientific practice within our culture. Many practicing anthropologists believe that the word 'science' comes with cultural and intellectual respectability. Even if the new long-range plan emphasizes advocacy over knowledge generation, Raymond Hames, the anthropology chair at the University of Nebraska, Lincoln, argues that the changes undermine the anthropologist's ability to advocate for effective change. “Science,” he argues, “has a special currency in courts, public opinion, and in the legislative process. If we purge science from our mission statement we lose our credibility, the ability to advocate for effective change, and hence our power to do good.”[10] He fears that anthropology will become “just another special interest group.”[11] The power of science to effectively advocate is founded on its presumed intellectual rigor and lack of political agenda. Another professor, Murray Leaf of the University of Texas at Dallas, reinforces Dr. Hames' argument. He agrees that the AAA's cultural clout is connected to its public image as a scientific institution. By rebranding the Association through changing the long-range plan, the AAA is effectively “speaking with the authority of science but without actually bothering to do the work and exercise the critical restraint of science.”[12] Moreover, with science comes federal research money. Other thinkers argue that the change to long-range plan jeopardizes the flow of funding to anthropology programs around the nation[13]. In short, the 'scientific' anthropologists

9 Stu Plattner, quoted in “No Science, Please. We're Anthropologists” by Alice Dreger. *Psychology Today*. 25 Nov. 2010. Web. <http://www.psychologytoday.com/blog/fetishes-i-dont-get/201011/no-science-please-were-anthropologists>
10 Ibid.
11 Ibid.
12 Murray Leaf, quoted in “Anthropology Association Rejecting Science?” by Peter Wood. *Chronicle of Higher Education*. 29 Nov. 2010. Web. <http://chronicle.com/blogs/innovations/anthropology-association-rejecting-science/27936>
13 Ibid.

want to retain their credibility in the public sphere by sticking to the term 'science,' regardless of the possibility that the humanities might have substantial contributions to the understanding of humankind. The more inclusive conception of anthropology is just "the play of opinion across ever-changing circumstances, and becomes virtually indistinguishable from popular myth, collective misunderstanding, political credo, and even sheer propaganda of one sort or another."[14] The changes did not go undefended. A few academics defended the changes by arguing that the 'science-free' mission statement no longer prioritizes the rationality of science "above the knowledge systems of the very people we have been studying."[15] Carl Dooglas, a doctoral candidate at the University of South Florida, claims that we must recognize that there are "other means of knowing, exploring, and explaining."[16] These other means have been neglected both intellectually and economically and it "well past the time for this to change."[17] The anthropologists who are open the revisions, however, have not convinced the scientific traditionalists. The rift between the scientific and the humanistic anthropologists manifests in the social configuration of academic conferences. The American Anthropological Association's annual events are colloquially called 'the meetings,' plural, because anthropologists "go and meet with their own actual disciplinary types, in separate groups, so that the real scientists don't have to deal too much with the fluff-head cultural anthropological types who think that science is *just another way of knowing*."[18] The anthropology community is polarized between those who view science as the only rigorous way to go about explaining humankind and those who view

14 Ibid.
15 Carl Dooglas. "Anthropology as Science." Recycled Minds Blog. 26 Nov. 2010. Web. <http://recycledminds.blogspot.com/2010/11/views-from-anthill-anthropology-and.html>
16 Ibid.
17 Ibid.
18 Alice Dreger. "No Science, Please. We're Anthropologist" Psychology Today. 25 Nov. 2010. Web. <http://www.psychologytoday.com/blog/fetishes-i-dont-get/201011/no-science-please-were-anthropologists>

science as just one of many possible ways of understanding humankind. Even if the label of science comes with more cultural authority and economic support, those who support the change believe that the more inclusive conception of anthropology is less culturally imperialistic and is more reflective about the scope and limitations of scientific practice.

In this paper, I will approach the debate over the long-range plan from two angles. Firstly, I want to understand how science came to dominate our intellectual discourse in such a way that it is considered to be a requirement for effective advocacy and sufficient funding. In order to understand how science became the only rigorous way of knowing, one must look at the history of science and, in particular, its relationship with philosophy. I support Edmund Husserl's argument that the nature of contemporary science is a residue of the interaction between philosophy and science. An analysis of this history reveals that science need not be an exclusive form of knowledge generation; at an earlier time, the two disciplines of science and philosophy were united under a common task. Secondly, I want to explore these other means of "knowing, exploring, and explaining." I will question the validity of the scientific method in making explanations about social phenomena. My criticisms of the social sciences rest upon the notion that social science misconceives the nature of social inquiry. As a result of these criticisms, I am lead to ask whether or not there can be an alternative that overcomes the problems specific to social phenomena and I will validate phenomenology as an alternative approach to social inquiry.

The 'two cultures' model that was formulated by C.P. Snow is not a diagnosis of the disease, but merely an awareness of a symptom. Science relies on a method that abstracts from individual phenomena the general character of the universe. This general character is expressed

in terms of physical-chemical explanations. Since inquiries into the social world require knowledge of the natural world, it is a common assumption that the knowledge produced by the natural sciences is primary and fundamental to the knowledge of the social.[19] In effect, the application of the scientific method has become an exclusive source of genuine knowledge generation. Science has become the ultimate arbitrator of truth and falsehood, hence why the greater Western cultural horizon, which relies on fact-minded science, produces merely fact-minded people with little interest in other forms of knowing.[20] The sciences have not always, however, taken this particular cultural configuration. A large portion of this paper is dedicated to the elucidation of earlier cultural configurations that existed for science. Over time, the sciences have lost sight of their ultimate task and original sense. I intend to make this task and this sense clear. Before this project can be undertaken, it must be stated that in returning science to its original sense I am not discrediting the accomplishments of hundreds of years of scientific research and production. In fact, it is only out of the deepest respect for scientific practice and humanity's well-being as a whole that a reconceptualization is required.

I don't believe that Einstein had a crisis of rationality in mind when he said, “the unleashed power of the atom has changed everything save our modes of thinking and we thus drift toward unparalleled catastrophe.”[21] Nevertheless, he feared a science run amok and that is precisely the state of science and culture today. Instead of the looming threat of nuclear war, there is the looming threat of the suffocation of alternative knowledge systems as a viable and alternative form of rationalizing. The result of a complete disconnection between the sciences

19 Edmund Husserl. “The Vienna Lecture.” *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*. Evanston, Illinois: Northwestern University Press, 1970. 271

20 Edmund Husserl. *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*. Evanston, Illinois: Northwestern University Press, 1970. 6

21 Need citation

and other forms of rationality is the self-impoverishment that C.P. Snow warned about, or as Husserl puts it, “it means nothing less than the loss of faith 'in himself,' in his own true being.”[22] We seek to return science to its original sense by reminding the greater Western cultural horizon that science is “a title for spiritual accomplishments…[and] like all spiritual occurrences, [it belongs] to the region of what is to be explained by humanistic disciplines.”[23] As philosophers, it is our obligation as functionaries of mankind to attend to this true being by remedying the schism between the sciences and these other forms of rationality. We are concerned with what science had meant and could mean for human existence.[24]

1 – The Theoretical Attitude and The Birth of Science in Philosophy

The relationship between the sciences and philosophy has not always been antagonistic; natural science and philosophy were once inseparable in principle and unified in attitude. It was only after the failures of modern metaphysics that science was decapitated. In this section I will follow along Husserl's historical program in *The Crisis of the European Sciences and Transcendental Phenomenology* to illustrate that both science and philosophy have changed since their inception in Ancient Greece. The ever-increasing 'mathematization' of nature, a notion that will be discussed shortly, gave birth to a conception of scientific knowledge that ultimately becomes disconnected entirely from lived experience. The alienation of scientific knowledge from lived experience has become the hallmark of contemporary scientific practice and perpetuates the aforementioned crisis in the human sciences. Moreover, this schematic

22 Husserl, Crisis 13
23 Husserl, Vienna 273
24 Husserl, Crisis 5

history of science is necessarily a history of philosophy. The philosophical inadequacies that festered in the modern period will become apparent..

The birthplace of both science and philosophy was the Ancient Greek civilization during the seventh and sixth centuries B.C.E.[25] An unprecedented approach to understanding nature arose from the *poleis* in the form of a new sort of *attitude*. The philosophical attitude sublimated into cultural formations that challenged traditional conceptions of nature. The traditional conception of nature for Ancient Greece was both a practical and a spiritual world. Husserl characterizes their 'surrounding world' as a locus of their cares and endeavors that integrated spiritual and historical structures.[26] Pre-philosophical Greeks were "naively, straightforwardly directed at the world, the world being always in a certain sense consciously present as a universal horizon without, however, being thematic as such."[27] This dynamic between the spiritual, historical, and intentional worlds, however, motivated both individuals and groups of individuals to reorient themselves towards nature in the form of a new attitude. In other words, "to make the world itself thematic, to take up a lasting interest in it."[28]

An attitude is, for an individual, a "habitually fixed style of willing life comprising directions of the will or interests that are prescribed by this style, comprising the ultimate ends, the cultural accomplishments whose total style is thereby determined."[29] Attitudes establish cultural norms, since the "constant directedness toward a norm inhabits the intentional life of individual persons, and thence the nations with their particular social units..."[30] The pre-philosophical attitude was essentially directed towards practical matters; men took interest in

25 Husserl, Vienna. 276
26 Ibid. 272
27 Ibid. 281
28 Ibid.
29 Ibid. 280
30 Ibid. 276

the world insofar as it could benefit them. The philosophical, or theoretical attitude, which arose out of the pre-philosophical attitude, however, is thoroughly unpractical.[31] Husserl suggests that this new attitude, disconnected from practical matters, came about as "a variant of curiosity, which has its original place in natural life…when one's quite immediate vital needs are satisfied or when working hours are over."[32] Unlike the pre-philosophical attitude, the theoretical attitude is an end in itself. The Ancient Greeks were "gripped by the passion of a world-view and world-knowledge that turns away from all practical interests and…strives for and achieves nothing but pure *theoria*."[33] The theoretical attitude is focused on ideas and establishing new cultural norms through the application of ideas.[34] Thus from its inception the theoretical attitude was a revolutionary new way to change cultural practices.

The theoretical attitude in Ancient Greece led to a self-consciousness regarding their own traditional cultural practices and a consciousness of the cultural practices of others. Early philosophers observed the multiplicity of pre-philosophical 'surrounding worlds,' each with their own practical interests and world-view, and distinguished between these world-representations and a singular, unified actual world. They sought to establish a theoretical world that contains truths which are "valid for all who are no longer blinded by tradition, a truth-in-itself."[35] Prime examples of this sort of knowledge are the Platonic Forms, Euclidean Geometry, and Aristotelian Syllogistics. Those who lived philosophical lives, that is to say lived lives unbounded from tradition and whose infinite task was the establishment of universal knowledge, communalized into a new cultural configuration. Communities of philosophers inspired non-philosophers who

31 Ibid. 282
32 Ibid. 285
33 Ibid.
34 Ibid. 277
35 Ibid. 286

were sympathetic to the cause, if unable to pursue the vocation themselves. Additionally, Husserl argues that "unlike all other cultural works, philosophy is not a movement of interest which is bound to the soil of the national tradition."[36] Philosophy, as an interest in universal knowledge, was able to transcend cultural boundaries and interest foreigners as well as Greeks. Philosophy as a cultural entity had a twofold effect on the Ancient Greeks: first, the impractical vocation of philosophy became acceptable as a cultural formation and, second, philosophers were allowed to broaden their community through a cross-cultural movement in education. As a result, there was a [37]

> far-reaching transformation of the whole praxis of human existence:...the whole of cultural life...must receive its norms not from naive experience and tradition of everyday life but from objective truth. Thus ideal truth becomes an absolute value which, through the movement of education and its constant effects in the training of children, brings with it a universally transformed praxis....if the general idea of truth-in-itself becomes the universal norm of all the relative truths that arise in human life, the actual and supposed situational truths, then this will also affect all traditional norms, those of right, of beauty, of usefulness, dominant personal values, values connected with personal characteristics, ect.

Philosophy was originally an attitude that questioned traditional values in the light of new ideas and an entirely new culture, guided by the notion of universal knowledge, was formed as a result. It should be noted that this new culture was not completely devoid of traditional concepts; merely, that Ancient Greek society after the proliferation of the theoretical attitude was characterized by a tension between the upheaval of traditional values and the establishment of new cultural practices in respect to critically analyzed ideas.

In the introduction to this section, I explained that Husserl's historical program in the

36 Ibid. 286
37 Ibid. 287

Crisis is a history of both philosophy and science simultaneously. As a history of philosophy, it is fairly straightforward; the rise of the theoretical attitude led to the cultural formulation of the vocation of philosophy and consequentially transformed traditional cultural practices out of respect for universal, ideal norms. It is not clear, however, how this *Geschichte* pertains to the development of science.

Both science and philosophy are breeds of the theoretical attitude. A scientific experiment "produces in any number of acts of production by one person or any number of persons something identically the same, identical in sense and validity."[38] Hence the hallmark of scientific practice, experimental repeatability, betrays the true nature of scientific discoveries: "what is acquired through scientific activity is not something real but something ideal."[39] Science's affinity for ideas is not the only characteristic of the theoretical attitude shared with philosophy: both are impractical insofar that they require a complete conceptual revision of traditional understanding and require the agent to keep a disinterested posture towards the world.[40] Moreover, as theoretical vocations and through their respective methods of research, both produce more and more refined ideas, which demand more and more time away from the practical life. Science can take the fruits of its research and use it "as material for the possible production of idealities on a higher level, and so on again and again."[41] In fact, science "signifies the idea of an infinity of tasks, of which at any time a finite number have been disposed of and are retained as persisting validities; these make up at the same time the fund of premises for an infinite horizon of tasks as the unity of one all-encompassing task."[42] This task was also the task

38 Ibid. 278
39 Ibid.
40 Ibid. 285
41 Ibid. 278
42 Ibid.

of philosophy. Philosophy "sees in the world the universe of what is, and the world becomes the objective world as opposed to representations of the world, those which vary according to nation or individual subject; thus truth becomes objective truth."[43] Science, likewise, sets its notion of truth apart from traditional notions of truth. Science "wants to be unconditioned truth," truly universal and beyond reproach except from itself.[44] Husserl argues that no other cultural form prior to philosophy kept a "culture of ideas knowing infinite tasks."[45] Therefore, insofar that science shares in the infinite task of discovering universal or objective truths, it is a mode of philosophy.

2 – The Mathematization of Nature and the Technization of Science

The rise of philosophy as a culturally acceptable and influential vocation in Ancient Greece introduced to mankind the demarcation between relative truths and objective truth, a truth-for-everyone. It is precisely this innovation that served as the foundation for later developments in both science and philosophy. The science and philosophy of the Renaissance, in particular, was keenly aware of the intellectual and cultural products of antiquity. The thinkers of the Renaissance turned against their previous – medieval- way of existing and sought to shape themselves in the image of ancient man; they wanted to recover ancient man's theoretical attitude.[46] Renaissance thinkers were inspired by ancient man's ability to free himself from oppressive tradition and also his dedication to universal, absolute knowledge. Renaissance thinkers, moreover, wanted to apply theoretical insights to practical life; they dreamed "not only that man should be changed ethically, but that the whole human surrounding world, the

43 Ibid. 292
44 Ibid. 278
45 Ibid. 279
46 Husserl, Crisis. 8

political and the social existence of mankind, must be fashioned anew through free reason, through the insights of a universal philosophy."[47] I will focus on two Renaissance ideas that still permeate contemporary scientific thought: first, that the world is intelligible through mathematical relationships and second, that the infinite application of the special method would give humankind a total mastery of all existing things. These two notions are precisely the cause of our crisis of rationality today, especially in the human sciences.

The science and philosophy of the Renaissance took the Ancient Greek notion of objectivity, a truth-for-everyone, and expanded upon it. Through a careful application of geometry and with the aid of steadily advancing technologies, the objective world of the Ancient Greeks was transformed into a mathematical-objective world. The adaptation of mathematical methods for empirical investigation was a paradigm shift for all ensuing scientific and philosophical inquiry. The world became synonymous with geometrical space – infinite, isotropic, coherent - and became intelligible in a revolutionary new way. The thinkers of the Renaissance, especially Galileo and Descartes, solidified a deductive method wherein "every object is ultimately attained according to its full being-in-itself."[48] Furthermore, the association of the intuitable 'surrounding world' with geometric space was essential to Descartes' dualistic metaphysics and, therefore, was foundational for the whole of modern philosophy. The task of modern philosophy, as envisioned by Descartes, was to unify all of the sciences under philosophy by virtue of a unified method.

If we take our prescientific, everyday sense-experience, the world is given to us in a subjective manner.[49] Even though each of us experiences the world in a slightly different way, the

47 Ibid. 8
48 Ibid. 22
49 Ibid. 23

differences in experience do not lead us to the conclusion that there are many worlds. In fact, as inheritors of the Ancient Greek theoretical attitude, we believe that there is one world, *the* world, from which all of our differences are accidents in regards to a true, objective nature.[50] Renaissance thought was preoccupied with explaining the phenomena within this objective world. Galileo worked from the "obviousness" of an objective world and sought to conceptualize all of its processes in terms of an equally objective system – mathematics.[51] There are, however, a few problems with mathematizing the whole of nature. Firstly, how do empirically concrete things, which have only approximate numerical values, translate into the ideal and apodictic domain of mathematics? Numbers and shapes are an idealization and cannot be found in the intuitively given surrounding world. Pure and exact geometric shapes are not experienced intuitively; objects are experienced as 'bodies,' which are gradations - "more or less straight, flat, circular, ect."[52] The answer is that the art of measurement, an ancient practice that became increasingly more precise over time, served the purpose of procuring objectivity from empirically ambiguous shapes.[53] Once measured, the empirical body becomes idealized as a geometric shape and can be manipulated in light of its *a priori* self-evidence as a geometric shape. The development of the art of measurement preceded Galileo and its application was taken for granted.

Secondly, how can we relate concrete empirical things, which only appear to conform to a general style of being, with abstract and ideal entities like numbers, which conform to self-evident and necessary rules? Events in our intuitable world are experienced in terms of a certain style. Some things are always experienced together and have the character of "belonging-

50 Ibid. 24
51 Ibid.
52 Ibid. 25
53 Ibid. 27

together."[54] The relationship between these things is not accidental and arbitrary; they "depend on one another in sensibly *typical* ways."[55] In fact, if we reflect upon the existence of an over-all style to our experience, we discover a universal causal regulation – in other words, "*all that is together in the world* has a universal immediate or mediate way of belonging together."[56] The world, then, is perceived as an all-encompassing whole – a system. The thinkers of the Renaissance would not have been operating in the theoretical attitude if they had settled on a vague consciousness of a world-causality. Therefore, in the same manner that ambiguous empirical bodies were associated with ideal geometrical shapes despite the aforementioned difficulties, the everyday notion of causality as an ambiguous "belonging-together" of empirically intuited things became associated with a notion of apodictic causality in both scientific and philosophical inquiry.[57] The idealization of concrete bodies and the application of a more limited conception of causality were the tools necessary for a genuinely objective, universal knowledge of the world. Armed with these innovations,[58]

> one can produce, for everything in the world of bodies which is extended in this way, a completely new kind of inductive prediction; namely, one can calculate with compelling necessity, on the basis of given and measured events involving shapes, events which are unknown and were never accessible to direct measurement.

Hence Renaissance thinkers uncovered, beneath the intuitable world, a universal and hidden inductivity upon which they could operate.

Galileo took the notions of quantification and universal causality and constructed a method for investigating natural occurrences. He sought causal interrelations which could be

54 Ibid. 30
55 Ibid. 30
56 Ibid. 31
57 Ibid. 31
58 Ibid. 33

mathematically expressed in "formulae."[59] Once the hidden causal relationships were discovered, the mathematical formulation of these particulars became universal "laws of nature," an objectified notion of the natural process in terms of the functional dependencies of numbers.[60] Working with formulae in the realm of mathematics allowed scientists to make "determined, systematically ordered predictions…going beyond the sphere of the immediately experiencing intuitions and the possible experimental knowledge of the prescientific life-world…."[61] Moreover, the use of mathematical formula-laws incited scientists to begin the task of objectifying all natural processes. The relations between natural processes, each with their own formulation, became a scientific curiosity. After the development of these Galilean methods, however, natural science underwent a transformation. Science developed its own *technique;* "that is, it becomes a mere art of achieving, through a calculating technique according to technical rules, results the genuine sense of whose truth can be attained only by concretely intuitive thinking actually directed at the subject matter itself."[62] In other words scientific inquiry now needed to follow specific rules; instead of justifying scientific results with observations in the intuitable world, scientific results could be justified in accordance to the *a priori* rules of mathematics and advanced methods of precise measurement. Consequentially, science, "from time to time, completely loses itself in merely technical thinking."[63]

The ramifications of the technization of science are manifold. The predictive power of natural laws caused scientists to lose sight of the true meaning of their work. In post-Galilean science, the act of objectifying the intuitable world became toilsome work that was merely a

59 Ibid. 40
60 Ibid. 41
61 Ibid. 43
62 Ibid. 46
63 Ibid. 47

pathway to a goal - ideal formula-meaning. In fact, as a result the intuitable world was substituted entirely by the world of mathematical idealities as the *real* world. Sense experience could no longer lead to genuine knowledge about the world without a process of approximate idealization. As such, the true being of nature itself became identified with mathematics.[64] This substitution was "promptly passed on to [Galileo's] successors, the physicists of all succeeding centuries."[65] Thinkers no longer needed to reflect back upon the ultimate soil of all idealization – the intuitable world. As a result, science's original meaning as the investigation of the *world itself* was forgotten and replaced by a conception of science as a technical craft that values primarily predictive power in the realm of idealities.[66] This shift in meaning for scientific practice resulted in a disconnection from other modes of inquiry into the world itself. Any and every attempt, after Galileo, "to lead the scientist to such reflections [on the nature of the intuitable world], if it comes from a non-mathematical, nonscientific circle of scholars, is rejected as "metaphysical."[67] In short, Galileo's technization of science brought to it an entirely new character – that of an unquestioned tradition.[68] Therefore, after Galileo, science diverged from its roots in the Ancient Greek theoretical attitude. The truth of scientific research was taken for granted and justified in terms of its adherence to the governing rules of mathematics and the proper procedures of accurate measurement. Science was no longer concerned with overthrowing old traditions in respect to a universal rationality; science established itself as a tradition and with this establishment began excluding other forms of knowing the world.

64 Ibid. 54
65 Ibid. 49
66 Ibid. 57
67 Ibid.
68 Ibid. 47

3 – Rationalist Optimism Versus Humean Skepticism

The solidification of science as an institution with specific and exclusive technical procedures directly influenced the entirety of philosophy in the modern period. The Galilean 'formula-world' excludes all notions of a personal, cultural, or historical life. As a result, reality is only the collection of extended bodies. The existence of non-quantifiable, and therefore non-scientific, subjective elements in the intuitable world, however, begs to be examined. In other words, a conception of reality that completely excludes the intuitable world clears the way for metaphysical dualism.[69] With the conception of nature as an "encapsulated, really and theoretically self-enclosed world of bodies," the world splits in two: the physical world and the psychic world.[70] Knowledge of the psychic world, if it is to be genuine knowledge in the same sense as the natural sciences, must be held to the same standards of rationality: it must be intelligible in terms of axioms and deduction. A new branch of science was created to understand this second metaphysical domain, the psychic, in the inherited terms of scientific rationality. Physics was given the domain of physical bodies and a new branch, the human sciences, were given the domain of spiritual existence. This is the true origin of the human sciences: they are the offspring of the Galilean technization of science and the inherent dualism that it implies. The particularities of the technization of the human sciences will be discussed in a later section. For now, it suffices to say that Galilean science incited a division in scientific inquiry between the physical and the psychic, the later of which would be taken up during the modern period by philosophy.

That the war to rationalize all aspects of existence took place on two fronts – the purely

69 Ibid. 60
70 Ibid. 60

physical and the purely spiritual – indicated to Descartes the necessity of an all-encompassing rational system. Hence the birth of epistemology with Cartesian 'First Philosophy,' the study of rationality itself. Cartesian epistemology sought to ground both the rationality of the physical world and the rationality of the psychic world in an over-arching universal rationality. In a sense, Descartes sought the ultimate objectification of reality; a reality without any doubts and that is truly universal. His method of achieving this ultimate objectification would occupy all Western philosophy to the present day. Descartes realized that,[71]

> only a radical inquiry back into subjectivity – and specifically the subjectivity which *ultimately* brings about all world-validity, with its content and in all its prescientific and scientific modes, and into the "what" and the "how"of the rational accomplishments – can make objective truth comprehensible and arrive at the ultimate ontic meaning of the world.

In attempting to provide a radical foundation for his new rationalism in subjectivity, however, he "accomplished the primal establishment of ideas which were destined, through their own historical effects, to explode this very rationalism by uncovering its hidden absurdity."[72] It is this hidden absurdity that becomes manifest through the course of modern philosophy and provides the intellectual context in which science is able, for better or worse, sever itself completely from philosophy.

Descartes' method of radical doubt was intended to produce genuine universal knowledge. Although an accomplished scientist in his own right, he was not satisfied with a mere science of physical bodies. Descartes imagined a science of the sciences: a universal philosophy in the same sense that the natural sciences were a universal mathematics.[73]

71 Ibid. 69
72 Ibid. 74
73 Ibid. 73

Philosophy, then, in all of its endeavors, required mathematically-analogous necessity. Philosophical insight "must stand upon a foundation of immediate and apodictic knowledge whose self-evidence excludes all conceivable double."[74] The so-called 'knowledge' gained from the intuitable world is riddled with doubts or possibilities of doubts. As such Descartes, along with the natural sciences, dismissed the intuitions as a source of valid knowledge. Unlike the natural sciences, however, which take the self-evidence of mathematics for granted as universal knowledge, Descartes' vision of a universal rationality – a rationality to the second power – required that even the so-called knowledge of the natural sciences be bracketed in his skeptical reduction.[75]

Yet the complete reduction of all beliefs did not indicate to Descartes the truth of a totalizing skepticism; from the position of absolutely no certain knowledge, Descartes intended to construct systematically all knowledge of world, "towards the gates of the heaven of an absolutely rational philosophy."[76] It is peculiar how Descartes was able to accomplish this goal when he puts out of play all knowledge of the world. Even if we "refrain from the taking any position on the being or nonbeing of the world…not *every* ontic validity is prohibited…."[77] The indubitable ontic validity to which Husserl refers is the Cartesian *cogito*. Hence "no matter how far I may push my doubt…it is absolutely self-evident that I, after all, would still exist as the doubter and negator of everything."[78] The *cogito* enabled Descartes to move from complete skepticism to universal knowledge because the ego was the required self-evident, foundational axiom. From there, Descartes could to construct systematically all that was lost in the reduction.

74 Ibid. 75
75 Ibid. 76
76 Ibid. 77
77 Ibid.
78 Ibid.

Conversely, anything that could not be constructed is to be dismissed as irrational. From the ego, Descartes proved the necessary existence of God and through His insurance of the truth of mathematics, the Galilean notion of scientific knowledge could be grounded in a universal philosophy.

There are problems, however, with Descartes method of radical doubt that undermine his intention to ground all worldly knowledge with an absolutely certain method. Ironically, Descartes' radical reduction was not radical enough. Both the lived body and the intuitable world in general are bracketed under the reduction, but the ego remains as self-evident and is thus distinct from the dubious world. Hence the ego, along with purely intellectual affairs like mathematics, is recognized with its own ontological category – the *mind* side of the metaphysical dualism. The world and the body, on the other hand, are transcendent and the truth of their existence requires demonstration. The Galilean conception of science, as we have seen, views the world as an ideality and, as an ideality, the world is intelligible to the mind. It is no surprise, then, that Descartes imported the Galilean conception of nature into his universal philosophy. Descartes' explanation of the *body* side of the metaphysical dualism betrays his belief in the "Galilean certainty of a universal and absolute pure world of physical bodies."[79] The question is why the belief in a 'pure world of physical bodies' wasn't also bracketed by the reduction, since, after all, the 'formula-world' of Galilean science is based on the intuitable world through the process of measurement. Husserl argues that,[80]

> It is obvious that Descartes, in spite of the radicalism of the presuppositionlessness he demands, has, in advance, a *goal* in relation to which the breakthrough to his "ego" is supposed to be the *means*. He does not see that, by being convinced of the possibility of

79 Ibid. 79
80 Ibid.

the goal and of this means, he has already left this radicalism behind.

Descartes took the Galilean conception of science – that universal objective truth is the relationship between logically necessary idealities - as inspiration for a new philosophy. Subjectivity only gives us a dubious account of the physical world. Descartes' goal of finding absolute objectivity through radical subjectivity was only possible because he imported a notion of universal-mathematical objectivity throughout the reduction to explain the physical world.

Descartes' failure to adhere to his own method of radical doubt by importing a notion of the 'external' world as pure bodies had a tremendous impact on the relationship between philosophy and science and their respective histories. For philosophy, the introduction of a post-reduction, world-constituting ego would radically transform all discourse up to the present. Both the rationalist and empiricist traditions that followed Descartes were greatly influenced by him, some more apparently than others. Every modern philosopher was concerned with "how the rational structures engendered in my reason (my own *clarae et distinctae perceptiones*) – those of mathematics and mathematical natural science – can claim an objectively "true", a metaphysically transcendent validity."[81] Indeed, this novel preoccupation was unheard of in the Ancient Greek world and ushered in an entirely new manner of philosophizing.[82] For Husserl, Descartes' discovery of the transcendental ego was the "Archimedean point" of genuine philosophy.[83]

In particular, Cartesian transcendentalism enabled and incited a new brand of philosophical skepticism in the philosophy of David Hume, which, ironically, would destroy any hope in comprehensive objective knowledge of the world and would permit the complete

81 Ibid. 81
82 Ibid.
83 Ibid. 80

severing of science from metaphysics. As early as 1748, Hume notes the general distaste for metaphysics even among the educated.[84] Metaphysics is difficult to read, understand and is far removed from the practical life. Despite its difficulty, Hume seeks to consider what can be reasonably pleaded on the behalf of metaphysics. He argues that the obscurity of metaphysics is due to uncertainty and error.[85] How can Cartesian philosophy, which employs a method of radical doubt, be laden with uncertainties and errors? To start, a radical reduction of all beliefs including sensations and the existence of an external world is so completely removed from 'nature' that nobody can truly sustain it.[86] From the position of truly radical doubt, Hume holds, "any human creature…would be entirely incurable [from the reduction]; and no reasoning could ever bring us to a state of assurance and conviction upon any subject."[87] Moreover, Hume denies the existence of the cogito from which Descartes intended to deduce all worldly aspects.[88]

Regardless of the errors in Cartesian metaphysics, Hume believed that a healthy skepticism is a "necessary preparative to the study of philosophy, by preserving a proper impartiality in our judgments, and [by] weaning our mind from all those prejudices, which we may have imbibed from education or rash opinion."[89] Hume posits that there are only two ways to justify a belief: demonstrative and probabilistic reasoning. Demonstrative reasoning, or 'relations of ideas', are intuitive and operate with necessary; they do not rely on what is existent in the universe. Disciplines like geometry, algebra, and arithmetic fit Hume's description of demonstrative reasoning. The truth of probabilistic reasoning, called 'matters of fact,' is not

84 David Hume. "An Enquiry Concerning Human Understanding." *The Clarendon Edition of the Works of David Hume*. Ed. Tom Beauchamp. New York, New York: Oxford University Press, 2001. 7
85 Ibid. 9
86 Ibid. 114
87 Ibid. 112
88 Ibid.
89 Ibid. 113

ascertained in the same way as demonstrative reasoning since "the contrary of every matter of fact is still possible…because it can never imply a contradiction."[90] Our understanding of matters of fact rely entirely on the notion of cause and effect, which through experience imparts to us a seemingly necessary connection between two events. This seeming necessity is not a logical necessity, however. An unfounded belief in the uniformity of nature, that it works the same over all times and places, established the custom wherein we "infer a connexion between the sensible qualities and the secret powers [of causation]."[91] If metaphysics seeks a truly objective understanding of reality, a truth wherein all relationships of existing things, both mental and physical, are understood in terms of absolute necessity as Descartes dreamed, then it is a fools errand.

After Hume it became clear that the goal of both philosophy and science, in the Ancient Greek sense as the identification of universal truths, is in principle impossible. Metaphysics must be committed to the flames, for it contains "nothing but sophistry and illusion."[92] The bankruptcy of philosophy in Humean skepticism, however, did not prevent later philosophers from taking up the project of establishing a rational foundation for objective knowledge. Kant, especially, took up the challenge of establishing the absolute validity of the objective sciences when he asked how the knowing ego can allow its self-evident rational constructs "to count as nature with a meaning transcending this ego."[93] For Husserl, however, Kant does not go far enough in revealing the "deeply concealed subjective ground whose philosophical elucidation will…reveal the true meaning of the accomplishments of positive science and, correlatively, the

90 Ibid. 24
91 Ibid. 32
92 Ibid. 123
93 Husserl, *Crisis* 92

true ontic meaning of the objective world."[94] The philosophy that Husserl has in mind, the one which comes face-to-face with *direct experience* and examines how the world is made objective through the paradoxes of the intuitable world, is phenomenology. Phenomenology is the final form the of transcendental philosophy that was originally initiated by Descartes.

Although the birth of transcendental philosophy permitted philosophy to reach, according to Husserl, an ultimate historical form in phenomenology (which will be discussed at length in later sections), the historical of development of philosophy had disastrous effects for its relationship with the sciences. If Cartesianism made possible the complete unification of science and philosophy through a method of indubitable reasoning, then Humean skepticism offers the absolute impossibility of synthesizing philosophy and science. Both philosophy and science, insofar that they seek objective knowledge, are futile. The most accurate description of philosophy would be an enjoyable pastime instead of a quest for truth.[95] Science, in contrast, certainly has its practical applications but Galileo's notion that science could explain the total being of all physical bodies through the infinite application of a specific deductive method is absurd. Science can only be the refinement of probabilistic reasoning that only asymptotically reaches truth. That philosophy could produce such disparate and mutually exclusive metaphysics, in spite of Kant's genius attempt to furnish a compromise between them, had the effect of uprooting any faith in the ideal of philosophy.[96]

> The belief in the ideal of philosophy and method, the guideline of all movements since the beginning of the modern era, began to waver... the contrast became monstrous between the repeated failures of metaphysics and the uninterrupted and ever increasing wave of theoretical and practical success in the positive sciences.

94 Ibid. 100
95 See Hume 121 "Those who have a propensity to philosophy...methodized and corrected."
96 Husserl, *Crisis* 10

This 'uprooting' or 'wavering' manifested itself in both laymen and scientists, who, in light of "the specialized business of the positive sciences, were fast becoming unphilosophical experts."[97] The implosion of reason has placed the sciences, especially the human sciences, in crisis by completely severing the connection between science and the original sense of philosophy. Since the Galilean understanding of science as working towards an ultimate understanding of nature is too metaphysically presumptuous, the developments in scientific theory after the philosophical failures of the modern period are largely focused on establishing methods and practices that rely on limited metaphysical insights; for all its efforts, however, the new science of the modern world was unable to shed all of its philosophical baggage and instead of establishing a pure science devoid of philosophy, the sciences that came after Kant perpetuated some of the absurd distinctions in modern philosophy and made a few of its own.

4 – The Positivist Method

Ignoring the warnings of modern philosophy, the philosophers of science in the early 20th century, largely scientists themselves, held that only an updated and rigorous scientific method, the hypothetico-deductive model, could produce valid knowledge about the world. This refined scientific method, which found its genesis in the intellectual movement known as logical positivism, justifies the truth its conclusions in terms of a type of deduction of natural phenomena, despite Hume's warning that "we are never able…to discovery any power or necessary connexion…any quality, which binds the effects to the cause, and renders the one an

97 Ibid. 11

infallible consequence of the other."[98] The essential premise of positivism is that this deductive method can produce valid knowledge in any sphere of inquiry – whether natural or human science.[99] These scientists thought that in order for a deductive method of inquiry to work, however, scientific propositions need to be purged of philosophical obscurity and a specific and unjustified metaphysical assumption must be made.

There are two levels of philosophical obscurity that positivism seeks to abolish – metaphysical and linguistic. Metaphysically speaking, positivism denies any "real difference between 'essence' and 'phenomena'."[100] Positivists believe that "we are entitled to record only that which is actually manifested in experience."[101] Experience, however, is defined in the narrow empiricist sense of atomistic sense-data.[102] Positivists, therefore, do not allow their scientific insights to have any other referents besides individual and concrete phenomena since, according to the empiricist model of experience, we only experience individual and concrete phenomena. As such, reality for positivism is a collection of individual observable facts only.[103] Furthermore, Positivism issued a revision of language. If the world is "a multitude of empirical facts and states of affairs," then it is the function of language "to copy, mirror or represent these facts and states of affairs in the same way that a picture or photograph represents something in the world."[104] Everyday language, however, is laden with ambiguities. In the *Tractatus Logico-Philosophicus*, Wittgenstein attempted to create an ideal language with which to describe the world of facts - one which abolishes the ambiguities of both everyday and philosophical speech.[105] Just like how

98 Hume 51
99 Laurie Spurling. *Phenomenology and the Social World: The Philosophy of Merleau-Ponty and its Relation to the Social Sciences*. London, England: Routledge & Kegan Paul, 1977. 76
100Ibid.
101Ibid.
102Ibid. 77
103Ibid.
104Ibid. 62
105Ibid.

the empiricist conception of experience is atomistic, Wittgenstein's formulation of an ideal language consists of elementary propositions that 'directly' refer to reality. Any assertion that cannot be broken down into elementary propositions that directly refer to observable facts must be dismissed as meaningless. Hence what Wittgenstein says in his preface to the *Tractacus*: "what can be said at all can be said clearly, and what we cannot talk about we must pass over in silence."[106]

Consequentially, both metaphysically and linguistically, positivism sustains a firm distinction between *description* and *evaluation*. Positivism wants to describe the world in terms of observable individual phenomenon known as facts. Values are not observable and are therefore not facts. Moreover, since positivism holds that all knowledge that is formulated in general terms that refer only to individual and concrete phenomena, positivism "obliges us to reject the assumption that beyond the visible world there exists a domain of values 'in themselves' with which our evaluations are correlated in some mysterious way."[107] Values, therefore, do not tell us anything about the world. Values, for positivism, only[108]

> express the speaker's own subjective, personal opinions or feelings towards an object, person or event. As such they cannot be counted as *empirical* statements, as either true or false, since they have no factual content, and hence cannot be accredited valid knowledge.

In other words, values are not a concern for positivism or knowledge properly so called; values do not add anything to our knowledge of the world. Scientific language, then, must rid itself of all such evaluative judgments and seek to establish an ideal discourse of purely descriptive statements. In order to rid itself of evaluative judgments, the positivist notion of adequate

106 Wittgenstein is quoted on Spurling 62
107 Kolakowski 1972 quoted on Spurling 111
108Ibid. 111

speech must be "impersonal, de-authored speech, free from individual bias and commitment, speech which copies nature rather than serving to reflect the speaker."[109] Once armed with a precise language of purely descriptive statements that correspond exactly to 'matters of fact' in the world, there is one final metaphysical claim that must be tentatively held for the hypothetico-deductive model of scientific inquiry to be possible. By the 18th century Hume already warned later about the impossibility of the deducing matters of fact. Remember: we can never prove the necessity of an effect from its cause since it is only through experience that we believe nature works the same at all times and places. Despite these warnings, the commonly held but logically unjustified belief in the uniformity of natural processes became implied in all positivist reasoning. This metaphysical notion is taken for granted.

Carl Hempel characterizes the hypothetico-deductive model in his treatise, *Philosophy of Natural Science*. He sustains that scientific evidence can be arranged into the form of a deductive argument. The premises of the argument come in two varieties, covering laws and particular facts. Covering laws are generalizations, constructed from individual concrete phenomena, that express uniform empirical connections and are taken for granted as true in an argument.[110] Covering laws are statements "to the effect that whenever and wherever conditions of a specified kind F occur, then so will, always and without exception, certain conditions of another kind, G."[111] Hempel, however, does not feel the need to "enter into the complex ramifications of the notion of cause; it suffices to note that the general maxim "Same cause, same effect," when applied to such explanatory statements, yield the implied claim that whenever an event of kind F occurs, it

109Ibid. 77

110 Carl Hempel. Philosophy of Natural Science. Englewood Cliffs, New Jersey: Prentice Hall, 1966. Print. 301.
I have a .pdf reprint of chapter 5 of Hempel's Philsophy of Natural Science from PHL342. I will use the .pdf pagination for references purposes.

111Hempel 304

is accompanied by an event of kind G."[112] Particular facts, in contrast, are those individual concrete phenomena that are being investigated and can be subsumed under relevant the covering laws. From these premises, also called *explanans* sentences, positivists like Hempel intend to draw a logically certain conclusion called the *explanandum*. While the positivist program of establishing clear criteria for knowledge on the basis of analyzing empirical facts with a deductive method appears plausible, albeit metaphysically presumptuous, in the context of natural science, there are manifold difficulties in adapting this approach to the human sciences. In the next section, I will analyze the coalescence of the formal human sciences, which were made in the image of the positivist project.

5 – The Appropriation of the Methods of the Natural Sciences in the Human Sciences

Galileo's technization of science produced a clear method for progress in the natural sciences. His method formulated general laws by quantifying observable phenomena and sought the relationships between these phenomena in terms of mathematical analogy. There are aspects of existence such as culture and history, however, that do not appear to be quantifiable or causal. The Galilean method of law-formulation is riddled with manifold difficulties when one applies it to these non-physical entities. Thus an abyss grew between our knowledge of physical and non-physical entities. While science was optimistic that the physical world could be explained in its entirety, the non-physical, or psychic world, however, lacked a rationality of its own. Descartes aimed to bridge the gap between the physical and non-physical by encapsulating both within a universal rationality. Although his project was largely a failure, his venture was highly influential

112 Hempel 303

for both science and philosophy. In particular, Descartes opened the psychic world to the possibility of rational analysis. Although disparate in so many ways, Cartesianism and positivism share a common goal: both seek a uniformity in all knowledge. Whether mental or physical, a conclusion is only veridical if it adheres to a particular method. For Cartesianism, the method is deductive and it stems from *cogito* as its original principle; from radical subjectivity, total objectivity is obtained. Positivism, likewise, utilizes a deductive method. This method, however, does not leap from subjectivity to objectivity. The positivist program purges all traces of subjectivity from its method and still seeks to establish knowledge of both the physical and mental worlds - completely devoid of any point of view.

The primary goal of this section is an elucidation of the positivist conception of the non-physical world. Since the core tenant of positivism is that the same method of hypothetico-deduction works to establish genuine knowledge in both the physical and non-mental spheres, I will analyze how well the positivist program can explain phenomena in the social world and illustrate a few inadequacies in their method. The application of the hypothetico-deductive method on the social world creates social theories that are lacking in meaning and are entirely detached from lived experience. The real question is – where should we look for viable alternatives to explain social phenomena?

The scientific attempt to understand social phenomena "has been dominated since its inception by a positivist paradigm."[113] The social sciences originally took up the positivist program for both methodological and practical reasons. Methodologically speaking, the positivist program advocated for the universal nature of the hypothetico-deductive method; that all genuine knowledge is knowledge explained in terms of deducing a conclusion from covering laws

113 Spurling 76

and individual concrete phenomenon. The application of this method to the social world was a matter of course. Moreover, the natural sciences have only gained momentum since the Galilean revolution in both theoretical and practical insights. The natural sciences made stunning accomplishments and created innumerable technological luxuries since the coalescence of positivism as a scientific movement. Natural science fascinates our time for its continuous ability to transcend the limits of human knowledge and ability. In fact, "the fascination science has for us makes it easy to adopt its scientific form as a paradigm against which to measure the intellectual respectability of other modes of discourse."[114] As such, the young disciplines of the human sciences in the early 20th century sought academic respectability by associating with the natural sciences.[115] Emilé Durkheim epitomizes the adaptation of positivist methodology when he boldly proposed to 'treat social facts as things,' things devoid of subjective aspect that could be understood in terms of the casual relations of quantifiable phenomena. I will return to Durkheim shortly when I illustrate his use of the hypothetico-deductive method.

The human sciences adapted the core tenants of positivism to explain the social world. The logic of the inquiry in the the natural sciences was appropriated by the human sciences; both the natural and human sciences relied the hypothetico-deductive method. Therefore, positivist theories of the human sciences seek to subsume individual phenomena under hypothetically proposed general laws. The conclusion of the hypothetico-deductive argument is both an explanation of the phenomenon in question and enables scientists to make predictions for that phenomenon when it is subsumed under the same covering laws.[116] Furthermore,

114 Peter Winch. "Understanding a Primitive Society." *Understanding and Social Inquiry.* Eds. Fred R.Dallmayer and Thomas A. McCarthy. Notre Dame, Indiana: University of Notre Dame Press, 1977. 162

115 Spurling 76

116 Fred Dallmayr and Thomas A. McCarthy. "The Positivist Reception." *Understanding and Social Inquiry.* Notre Dame, Indiana: University of Notre Dame Press, 1977. 78

positivist social science adhered to the aforementioned revisions of language and sought to purge all subjective aspects from its scientific conclusions. In order to maintain (or achieve) objectivity, theories are established value-free - purely descriptive - and thus the conclusions are value-free. Consequentially, positivist social science sought to construct an ideal system or model of society in accordance with the canons of clear and ideal speech. This movement aims to construct a model of the 'social system', a framework consisting of shared values and norms, which act as covering laws, into which individuals are inserted as actors or role-players and are subsumed under the 'covering laws' of established values and norms.[117]

There is a fundamental problem, however, with this artificial construction of society. Since the language of positivism is conceived as a purely factual and descriptive representation of the world, it is an impersonal language. Positivist theorizing is un-reflective: "the theorist has no interest in the grounds of his own theorizing, in the process of theorizing itself in so far as it serves to disclose something about the theorist and the kind of world he lives in."[118] Without recourse to first-hand experience of values and norms, how is a social scientist supposed to create an ideal system of established values and norms? Through what empirical process is a value to be discovered? Even if we connect a value to an overt and empirical behavior, what process of validation would ensure that the value to be established is in fact related to the overt empirical behavior? In short, the problem is that "positivism is not concerned with how a theory is generated, but only with how it is empirically validated, and worthy to be considered valid knowledge."[119]

Despite the difficulties of establishing positivist theories of the social world, many

117Spurling 78
118Ibid. 79
119Ibid.

scientists have tried. Let us return to Durkheim. In his 1952 study on suicide rates, often cited as a classic of 'scientific sociology,' Durkheim adhered to the positivist program by treating suicide rates 'as things.'[120] He investigated suicide without taking into account the differences in its subjective meaning from person to person, ethnic group to ethnic group. Instead, Durkheim analyzed the statistics of suicide rates among various ethnic groups and attempted to explain the statistics in terms of other statistics. He concluded, however, that the cause of higher suicide rates in a given society was "the degree of what he called egoism, altruism, or anomie exhibited by the individuals of that society or group, which in turn was the result of the degree of social integration of those individuals."[121] The question is how Durkheim went from objective and impersonal statistics to a notion like egoism or altruism, which are not quantifiable. In fact, the meaning of these causes – egoism, altruism, and anomie – are not themselves under investigation and are taken for granted by Durkheim. His interpretation of these causes did not find its genesis in how the individuals of the particular social group viewed suicide, but instead the meaning of these notions were "drawn from *his* own common sense understanding of everyday social experiences."[122] Durkheim never treats the social meaning of a phenomenon as the subject of his investigation. Therefore he must 'plug the gaps' in his explanations with his common-sense understanding of the relevant subjective aspects in order to make any sense of the statistics. Durkheim's study of suicide demonstrates how positivism is not concerned with how a particular theory is generated – clearly there was no scientific process of defining egoism, altruism, or anomie -, positivism is only concerned with how a theory is validated. In short, positivist social science is only concerned with the criteria of validation and not the context in

120Ibid. 80
121Ibid.
122 Spurling 80, emphasis mine

which the theorist makes discoveries. The subjective elements of both the theorist and the people being theorized about must be taken into account by any genuine social inquiry.

We must ask, along with social theorist Max Weber, "what is the significance of theory and theoretical conceptualization for our knowledge of cultural reality?"[123] Does the positivist tenant, that the hypothetico-deductive method can yield genuine knowledge in all field of inquiry, really apply to the social sciences as Durkheim believed? There are two fundamental flaws with the positivist program that stifle its ability to gain genuine knowledge of the social world. Moreover, these flaws are due to its core beliefs. The shortcomings of positivist social theories call into question the possibility of both subsuming human action under covering laws and maintaining an ideal, evaluation free language. In short, the answer is no – the positivist paradigm is unsuited for grasping the social world. It is not, however, completely irrelevant to social inquiry.

Let us begin with the one core belief of positivism: that all genuine knowledge is the deduction of a particular phenomenon under a relevant covering law.. The keyword for understanding the shortcomings of the nomological model is 'relevance.' Laws are comprised of individual and concrete phenomena that are analyzed in terms of specific causal properties. The establishment of a law brings with it the ability to explain a great number of similar phenomena. There can be, however, phenomena that the application of a particular and seemingly relevant covering law cannot explain. These unexplained occurrences are conceptualized in two ways. These anomalies can be explained as the result of inadequate methods of measurement and that, in the future, these anomalies will be accounted for in a more perfect system of laws.

123 Max Weber. "'Objectivity' in Social Science and Social Policy." *Understanding and Social Inquiry.* Eds. Fred R. Dallmayer and Thomas A. McCarthy. Notre Dame, Indiana: University of Notre Dame Press, 1977. 33

Alternatively, these problematic elements of a phenomena can be viewed as 'accidental' to the phenomenon itself and therefore scientifically unimportant "*because* they do not fit into the structure of the "law."[124] A problematic phenomenon appears to be either entirely explainable or entirely unscientific without any middle ground.

Positivist social science has unsuccessfully attempted to explain human action, one such problematic phenomenon, in terms of covering laws and causality. Their conclusions transform the meaning of human action to accommodate the positivist understanding of valid knowledge. Let's take an example of a man taking and eating chicken from the refrigerator and try to subsume it under a general, covering law. A positivist can explain this action by establishing a covering law: that the man, when hungry, will eat something which was first removed from the place where food is stored. While this law does explain the phenomenon of the hungry man, it does not elucidate why he chose chicken over ham, which is a specific element of the phenomenon that defines the act. In fact, this covering law is equally explanatory even if the man retrieved and consumed human flesh from his refrigerator even though the act of eating human flesh is an act of an entirely different category than simple hunger. The point to this thought experiment is that "while the deductive model can be applied to the field of human actions, it is only accomplished through a transformation of the *meaning* of the action."[125]

Furthermore, the deductive model requires that social phenomena behave causally. Causal explanation, in its strict Humean sense, has three conditions: "1) there must be a contingent and external relation between two discrete entities or events; 2) the cause must be temporally prior to the effect; 3) there must be a constant conjunction between cause and effect,

124 Ibid. 25, emphasis his

125 The Hungry Man thought experiment was originally proposed by Alan Blum in 1971. It is quoted from Spurling 79, emphasis mine

that is, the relation must be of the form: if A, then B."[126] Positivist social science conceives of the *cause* of human action as a motive, while the *effect* is the action that was inspired by the motive. In common usage, it is possible to explain social phenomena this way: the man was jealous so he killed his wife. Here, the jealousy was the cause of the murder. Yet, upon further analysis, there is not a clear separation between the motive and the action; motive and action are conceptually related and *meaningful*. It is "part of the meaning of being jealous that one is liable to kill one's wife."[127] Therefore the "motive and the action are not discrete, separate phenomena, since the motive is an interpretation of the action..."[128] Moreover, there is no clear chronology of motive and action. If we continue with the example of the jealous husband, it is nonsensical to ask *when* the jealousy started in relation to the murder. Was the husband jealous days before the murder? Minutes? Did the jealousy cease after the murder? The sensibility of a motive is not tied to a specific time-line in the same way that cause and effect are necessarily chronologically sequential. A motive is more a specification of the variety of action than a necessarily preceding psychological state; that is to say it is meaningful instead of causal.[129] Lastly, social action does not conform to the formula: If A, then B. If the husband argues that he killed his wife out of jealousy, he is not giving a *cause* for his action but a reason or motive. This is the case because it was not necessary, in the mathematical or strict causal sense, that he kill his wife; he could have done other even while being jealous. For example, he could have *decided* to get a divorce or seek mental support. In short, the technical sense of causality, which positivism requires as a criterion of genuine knowledge, is unable to describe human actions in a manner that reflects lived experience. In order to make human action intelligible, positivism must radically transform its

126 Ibid. 80
127 Ibid. 83
128 Ibid.
129 Ibid.

meaning.

While it is plausible to explain natural phenomena in terms of general laws, the nomological model of explanation is inadequate to grasp the meaning of human action. General laws are intended to comprehensively explain a broad variety of related phenomena but, in doing so, the laws become too abstract, too removed from reality, and hence devoid of meaningful content. The various problems with a nomological explanation of human action, however, do not discount entirely the practice of trying to understand social phenomena in terms of a purely objective facts. It is only when one takes a nomological explanation as a total and complete understanding of human action that positivist social science becomes inadequate. For Weber, "the knowledge of causal *laws* is not the *end* of the investigation but only a *means*."[130] Laws are merely heuristic devices that point us toward the individual and culturally significant – that is to say, *meaningful* – elements of a social phenomenon.

The positivist revisions of language, likewise, are not tenable. The goal of the positivist ideal language was the development of a purely descriptive language that reflects the world itself, free from subjective biases and evaluations. The fundamental flaw with the positivist linguistic program is that description cannot be entirely separated from evaluation. If we try to describe even a simple causal process, there are an infinite number of causes that precede it. There is nothing in the events themselves that dictate the priority of one cause over another in the process of creating a given event. Therefore, in order to describe a causal process we must select "a *part* of concrete reality [that] is interesting and significant to us…"[131] The selection of a relevant phenomenon as the beginning of a description is culturally influenced, therefore the very act of

130 Weber 29, emphasis his
131 Ibid.

"objectively" describing an event already presupposes a subjective worldview. Furthermore, since description requires the selection of an originating phenomenon from an infinity of preceding phenomena, a description cannot in principle be exhaustive of reality. The positivist ideal language tries to make language sensible in terms of reality. As Peter Winch claims, however, "reality is not what gives language sense"; "what is real and what is unreal shows itself *in* the sense that language has."[132] Hence evaluation is prior to description and the basis upon which a grasp of reality is possible. The admixture of description and evaluation makes itself manifest in our everyday language. The sentence 'this room is cozy' seems to be a purely evaluative statement, since there are no empirical criteria for coziness. Coziness, however, for those who understanding the meaning of the term, implies a range of possible phenomena that excludes some and includes others: for example, a cozy room would probably not have a concrete floor but it might have thick carpeting and lots of furniture.[133] Many words are like cozy in this sense – these words tell us both something about the world and express how we feel about it. Therefore, words can be and are often both evaluative and descriptive simultaneously.

These difficulties in adapting positivism for the human sciences did not go unnoticed by the social scientists of the past. In light of the problems in the social sciences, positivists – in particular Richard Rudner – attempted to make a distinction between a context of theory formation and a context of empirical validation. Even if positivism grants that there are necessary subjective aspects in the establishment of a social theory, since both causal explanation in general and the premises of the hypothetico-deductive argument are laden with a subjective worldview, the positivist "rationale of validation" does not need to be dismissed.[134] The

132 Winch, *Primitive Society*162
133 Spurling 112
134Richard Rudner. "On the Objectivity of Social Science." *Understanding and Social Inquiry*. Eds. Fred R. Dallmayer and Thomas A. McCarthy. Notre Dame, Indiana: University of Notre Dame Press, 1977. 96

inadequacies of the positivist method in how it handles meaningful phenomena can be sidestepped by connecting the meaning of a situation to overt behavior. Hence, "all that is required for scientific validation of the relevant hypothesis is that *some* observable state of affairs be a *likely concomitant* of the value phenomenon in question..."[135] Once a meaning is correlated with a phenomenon, the action can be subsumable under general laws. That an overt behavior only needs to be a 'likely concomitant' of a meaningful, value phenomenon, however, indicates a departure from the hypothetico-deductive method and thus is equivalent to jettisoning social inquiry from the core tenants of positivism altogether. The positivist criteria for genuine knowledge cannot apply to social inquiry because social phenomena are largely meaningful and are not susceptible to empirical validation in any deductive sense.

If positivism is so bound up in its methodology that it is unable to understand social phenomena, then an alternative is required. The problem is that,[136]

> the form of life of positivism, its world view, basic assumptions, and fund of concepts, are so deeply ingrained...that many social theorists seeking alternatives unwittingly rely on conceptions and assumptions of the very form of life they are trying to escape from. Or else vague and rhetorical proposals are put forward for a more 'humanistic' or 'reflextive' approach by social scientists, without specifying the ontological or epistemological bases for such projects.

Hence, "a viable alternative to positivism can only come about by positing a radically different form of life for theorizing."[137] In the next section, I will show how positivism boxed out social inquiry from the domain of philosophy and, as a result, how there is little interplay of ideas and both have become mutually incomprehensible to each other. I believe that the phenomenological philosophies of Husserl and Merleau-Ponty can bring guide social inquiry by

135 Spurling 82
136Spurling 84
137Ibid. 84

offering new criteria for genuine knowledge and heuristic tools for the creation of more advanced and meaningful social theories.

6 – Bringing Science and Philosophy Together

It would be wise at this juncture to recollect the arguments presented in previous sections. Scientific theorizing has, over the course of its evolution, dismissed philosophical knowledge as valid knowledge. Philosophy and science had shared origins in the theoretical attitude of the Ancient Greeks and the interplay of philosophy and science remained lively and influential into the Renaissance times. It was only when Galileo developed a method particular to the sciences that a methodological wedge was placed between it and philosophy. The Galileo's method of uncovering hidden causal connections and the development of formula-worlds, a worldview that took reality as the relationship between bodies and numbers in pure geometrical space, was refined in the 19th and 20th centuries by the positivism movement to exclude certain metaphysical presumptions but, in actuality, assumed many others. One such assumption was that an experimental and deductive method is the only means of producing genuine knowledge about the world. There are, however, manifold difficulties when one applies the hypothetico-deductive method to human action. Human actions are not subsumable under general laws nor does human action conform to a strict Humean form of causality. Moreover, the strictly scientific (descriptive) language that positivism sought to employ is inadequate to truly express the world in an exhaustive and explanatory way. Thus positivist has left the human sciences in a dilemma. If the positivist criteria for genuine knowledge are accepted as the exclusive form of genuine knowledge generation, then human action cannot be a valid object of inquiry and is therefore

irrational.

In other words, all social inquiry must be dismissed as irrational because social inquiries do not conform to the methodological requirements of genuine knowledge. If, however, we do not grant to the positivists that their method is the *only* way of knowing the world, then there are possible alternatives that can explain human action in a more meaningful way. I believe that the only recourse for the human sciences would be a return to its scientific roots – in the spirit of philosophy and the theoretical attitude. First, I will argue along with Peter Winch that the task of social inquiry belongs more to the domain of philosophy than positivist science. The next task at hand will be the choice of a philosophy that is best suited to account for human action. Along with Husserl, I will argue that a philosophy adequate to describe human action must be true to lived experience; phenomenology can explicate the intuitable grounds upon which both the natural and human sciences stand and provide for us the means of overcoming the scientific crisis. Finally, I will contend that Husserl's intellectual descendant Maurice Merleau-Ponty provides an insightful continuation of Husserl's historical-teleological program that can totally undermine the positivist program. Merleau-Ponty calls for a new ontology, the "radical new way of theorizing," that can bring both the human and human sciences back down to Earth.

The task and scope of philosophy was transformed from its original Greek sense as a consequence of the positivist methodology. Positivists believe that genuine knowledge is produced exclusively by the hypothetico-deductive method and this method relies on *a posteriori* reasoning. Positivism reasons from individual phenomena in an experimental setting to establish a general covering law, which once established is assumed to operate with necessity over all instances of the individual phenomena that helped inform the creation of the law.

Philosophy, in contrast, employs *a priori* reasoning to come to terms with the nature of reality. Since, according to positivism, an understanding of reality is only possible through an experimental method and a *posteriori* reasoning, philosophy cannot tell us anything about the world of fact. Therefore, "traditional philosophy was attempting to do something which its methods of investigation could never possibly achieve, and must be abandoned."[138] Philosophy did, however, serve a purpose for positivism. Philosophy could clarify linguistic obscurities in an effort to clear the way for even more complete scientific explanations of reality. Philosophy, therefore, was parasitic upon other disciplines like science, art, or politics; it served to make their findings more comprehensible. Philosophy was permitted to exist in a functionary role for *a posteriori* disciplines. Positivist science felt challenged by philosophy insofar that philosophy commented on the nature of reality in general. Yet, "if the integrity of science is endangered by the *over*-estimation of the *a priori*, against which Hume legitimately fought, it is no less true that philosophy is crippled by its *under*estimation: by mistaking conceptual inquiries into what makes sense to say for empirical inquiries which must wait upon experience for their solution."[139] In other words, philosophical questions cannot be answered by "'waiting to see' what empirical research will show us; it is a matter of tracing the implications of the concepts we use."[140] It is important to remember that in its original Greek sense, philosophy is concerned with the elucidation of reality and intelligibility itself. Science is unable to fulfill role of exhaustive knowledge production since an *a posteriori* method of inquiry into all aspects of existence is impossible. To generalize from particular instances to universal knowledge always presupposes the particular instances as 'real,' when it is reality of the particular instances that is precisely in

138 Peter Winch. *The Idea of a Social Science and its Relation to Philosophy.* 1958. London, England: Routledge Press, 2009. 8
139 Ibid. 15
140 Ibid. 17

question.[141] Language, then, is a focus of philosophical meditation only insofar that language and thought relate to the intelligibility of reality, of "how language is connected with reality, of what it is to *say* something."[142] Positivism is obsessed with the criteria of genuine knowledge: knowledge that is validated by experimental data and is expressed through purely descriptive language. Philosophy, in contrast, is concerned with describing the conditions, through language, which must be satisfied for there to be any criteria of genuine knowledge at all. [143]

The most basic assumption of all positivist science is that a specific conception of an external reality is taken for granted. Positivist social science, however, does not realize that our conceptions of reality affect our behavior.[144] Hence why Durkheim wrote:[145]

> I consider extremely fruitful this idea that social life should be explained, not by the notions [of reality] of those who participate in it, but by more profound causes which are unperceived by consciousness....Only in this way, it seems, can history become a science, and sociology itself exist.

These notions of reality must be taken into account to understand the *meaning* of social action, the true goal of sociology according to Weber. The clarification of notions of reality, which affect how people interact in meaningful ways, cannot be explicated using *a posteriori* methods. Hence positivist sciences' inability to handle meaning. Since these notions can, however, be explicated though *a priori* reasoning, social inquiry is really more within the domain of philosophy than of science. For Winch, "to be clear about the nature of philosophy and to be clear about the nature of the social studies amount to the same thing."[146] In fact, "the central problem of sociology, that of giving an account of the nature of social phenomena in general, itself belongs to

141 Ibid. 9
142Ibid. 11
143Ibid. 20
144Ibid. 21
145Ibid. 22
146Ibid. 3

philosophy....sociology is really misbegotten epistemology."[147] Sociology is 'misbegotten' epistemology because sociological problems have been misconstrued as a species of scientific problem.

The real question is, then, which philosophical tradition is best to explain social phenomena. Winch does not propose a specific tradition or thinker that is most capable of handling social inquiry. He does argue, however, that any philosophical understanding of social reality must take into account the *meaning* of human action and meaning is only possible through both language and the application of a *rule*. Wittgenstein's project in the *Tractatus Logico-Philosophicus* attempted to create a purely descriptive language that mirrored the existing world. Wittgenstein did not realize, however, until much later on that language itself makes the world intelligible. In his later *Philosophical Investigations*, Wittgenstein rejected his earlier project of establishing a purely descriptive language and instead sought to understand language as it is actually used. One of his crucial discoveries is why words to retain their meaning over time even though words are applicable in some situations and not in others. The logic that sustains the meaning of a word over both time and varied contexts is a *rule*. Rules dictate when a certain word is applicable and when it is not. The rules that determine the use of words are not established by individuals; "it is only in a situation in which it makes sense to suppose that somebody else could in principle discover the rule which I am following that I can intelligibly be said to follow a rule at all."[148] The rule-governed nature of language reveals a latent intersubjectivity to all speech; language can only exist and have meaning in the presence of others. Language cannot be de-authored and unreflective, as positivism had hoped. Language is

147Ibid. 1
148Ibid. 28

intimately bound to a speaker and a listener. To imagine a language that was created solely by an individual is absurd – as if someone could be first to take part in a tug-of-war.[149] Now, according to Max Weber, meaning is the ultimate goal of social inquiry. Meaning is established when an action has a subjective sense to a participant in a social interaction and, moreover, when this sense is symbolic; the symbolic sense of an action "commits the agent to behaving in one way rather than another in the future."[150] Just as the meaning of a word over various contexts is maintained through the application of a rule, the sense of an action over various contexts is likewise determined by the application of a rule. Hence why we can "only be committed in the future by what I do now if my present act is the application of a rule."[151] All social action, therefore, is rule-governed behavior; "all behavior which is meaningful (therefore all specifically human behavior) is *ipso facto* rule-governed."[152] If we decide, along with Winch, that social inquiry is really within the domain of philosophy instead of science, a philosophy of social inquiry must take into account the intersubjectivity revealed through language and our everyday interactions with others. Any social theory must take into account the relationship between the observer and the observed, so that the rule which governs the observed's behavior can be made explicit and meaningful.

If philosophy is the most valid framework from which to investigate social reality, the important question is *which* philosophy is best suited to handle the complex task of theorizing human action. Phenomenology, according to Husserl, is the final form of transcendental philosophy that was started by Descartes.[153] Phenomenology takes up the Cartesian task of

149Ibid. 34
150Ibid. 47
151Ibid. 47
152Ibid. 48
153Husserl, *Crisis* 70

grounding all knowledge in a leap from radical subjectivity to objectivity. Regarding the social world, phenomenology aims to remind philosophy and the social sciences of their common ground – the intentionality of consciousness.[154] Phenomenology returns to the source of all knowledge, consciousness, which is "a realm of something subjective which is...functioning in all experiencing, all thinking, all life, [and is] thus everywhere inseparably involved; yet it has never been held in view, never been grasped and understood."[155] Phenomenology, unlike positivism, is true to its roots in the Greek theoretical attitude. Phenomenology seeks true universality by inquiring into the "purely internal consideration of the subjectivity which 'expresses' itself" objectively.[156] Phenomenological philosophy seeks all possible knowledge through the infinite task of elucidating the intuitable, pregiven 'life-world.'[157] For Husserl, an elucidation of the life-world is the foundation of all rightfully-so-called objective scientific practice. The life-world is "the grounding soil of the 'scientifically true' world and at the same time encompasses it in its own universal concreteness."[158] It is from this life-world that we experience and have any conception of truth or falsehood in any scientific sense.

Above all, phenomenology is the philosophy most qualified to handle social inquiries because the life-world reveals the essential intersubjectivity of consciousness which is required for meaningful behavior. Although our thoughts and experiences are uniquely our own, our experiences are also typical or universal in that they share with others a common style, common themes, and common significations.[159] The phenomenology of perception reveals that the belief in the existence of Others is precedes any philosophical formulation of solipsism. Husserl claims

154Spurling 85
155Husserl, *Crisis* 112
156Ibid. 113
157Ibid. 122
158Ibid. 131
159Spurling 85

that Others are always a horizon of our experience. In fact, our notion of truth is only possible through a reciprocal correction between our isolated experiences and the perceptions, experiences, evaluations, doubts, questions, and illusions of Others.[160] Likewise, Merleau-Ponty argues that Others are a genuine structure of our experience, not merely one of its contents.[161] Furthermore, Jean-Paul Sartre illuminates how the Other is intuited by consciousness not just as another external object, but as another consciousness which can hold me as its object in his philosophy of the 'gaze.' Moreover, the phenomenology of language rejoins Winch and Wittgenstein insofar that language discloses that we participate in a common body of significations with Others. We do not create language as individuals, but utilize it as a cultural object in which we are immersed since birth.[162] Hence why Merleau-Ponty says, "there is, then, a taking up of others' thought through speech, a reflection in others, an ability to think *according to others* which enriches our own thoughts."[163] Phenomenology is ready and able to handle the demanding requirements of genuine social inquiry, if social inquiry is defined as the understanding of the meaning of an act, because phenomenology goes beyond the subject-object dichotomy present in both empiricist and rationalist traditions and attempts to show how both language and perception are born in the preobjective life-world, which is "the foundation that is always presupposed by all rationality, all value, and all existence."[164]

The life-world is problematic for positivism. Positivism rejects the life-world as a valid object of inquiry because the life-world cannot conform to the positivist methodology. Contrary

160Husserl, *Crisis* 163
161Maurice Merleau-Ponty. "The Child's Relations with Others." *The Merleau-Ponty Reader.* Eds. Ted Toadvine and Leonard Lawlor. Evanston, Illinois: Northwestern University Press, 2007. 168
162Spurling 52
163Merleau-Ponty. *Phenomenology of Perception*. London, England: Routledge Press, 2002. 208
164Merleau-Ponty. "The Primacy of Perception and its Philosophical Consequences." *The Merleau-Ponty Reader.* Eds. Ted Toadvine and Leonard Lawlor. Evanston, Illinois: Northwestern University Press, 2007. 90

to the positivist goal of creating universal knowledge that is free from the biases of individuals, it seems that investigations into the life-world require an investigator to take into account both their own biases or the biases of others. Investigations into the life-world also reveal that it is laden with evaluations. Since there is no empirical process through which evaluations can be confirmed as universally accepted or denied, positivism cannot validate any knowledge of evaluations, nor would it call information about evaluations knowledge in the genuine sense at all. Lastly, investigations into the life-world cannot yield premises from which a conclusion can be deduced. Conclusions regarding the life-world have no recourse to formal logic and therefore positivism is unable to attain its practical end - predictive power. Consequential to the methodological difficulties, positivism ignores the life-world altogether. Positivism takes a world of pure bodies that behaves according to a hidden causality for granted and dismisses as irrational any attempt to elucidate the inner workings of the human mind that cannot be explained in terms of biological processes and general laws. By refusing to enter into the domain of lived experience, science cuts itself off from its source and the information that can be gleaned from the elucidation of this source. Despite that the theoretical attitude that inspired both science and philosophy sought to overthrow traditional notions, positivism itself can be characterized as a tradition because it assumes the certainty of its method and denies the possibility of any other form of knowledge production. In demonstrating the reality of the life-world, phenomenology clarifies the intellectual abyss between philosophy and science. Husserl conceived of phenomenology as the apex of theoretical thought that can unite philosophy and science again and for good.

7 – Merleau-Ponty, Phenomenology, and the Social World

Husserl sought to explain the crisis of science by telling the interrelated history of both philosophy and science. This history, for Husserl, contains a 'unitary meaning' that can be used to gain self-understanding for both philosophers and scientists.[165] It shows us how science forgot its origins in the theoretical attitude and how philosophy wrestled with the understanding of its own possibilities.[166] Husserl believed that phenomenology was the ultimate form of philosophy because it was self-conscious of its origins both in the theoretical attitude and in the history of philosophy. From "apparent oppositions and parallels," Husserlian phenomenology was to be "a meaningful, final harmony."[167] Phenomenology, however, did not end with Husserl. In fact, its popularity led to the birth of various phenomenologies that adhered – some more, some less – to his program of elucidating pre-objective experience. Maurice Merleau-Ponty was one prolific phenomenologist who was greatly inspired by Husserl's program. In fact, I interpret the first chapter of Merleau-Ponty's last work, *The Visible and the Invisible,* as a continuation of Husserl's historical-teleological project. In this section I plan to show how Merleau-Ponty's historical analysis continues where Husserl left off. Merleau-Ponty provides the ontological foundation for a radical new way of theorizing about both natural and human science. As a consequence of his new ontology, the social studies are in close relation to philosophy and are able to account for meaningful behavior. Additionally, I want to show how Merleau-Ponty, unlike Husserl, shows us a way out of the scientific crisis by elucidating the grounds upon which a rational ethics is possible.

Merleau-Ponty is largely in agreement with Husserl's historical analysis. Merleau-Ponty

165Husserl, *Crisis* 14
166Ibid. 15
167Ibid. 73

reaffirms that science before the Renaissance "clung to a feeling for the opaqueness of the world, and it expected through its constructions to get back into the world."[168] Ever since the Galilean technization of science, however, scientists "see themselves and represent themselves to be autonomous [from metaphysics], and their thinking deliberately reduces itself to a set of data-collecting techniques which it has invented."[169] The techniques of science have become sedimented into, what Merleau-Ponty calls, operational thinking. For science, reality is not "that upon which we have an openness," as Husserl would argue, but "only that upon which we can operate."[170] Genuine knowledge is what scientists "have succeeded in determining by measurement, or more generally by the operations that are authorized by the variables…relative to an order of facts."[171] To distinguish between fact and non-fact, however, requires a metaphysics, which operational thinking alone cannot produce. Both Merleau-Ponty and Husserl agree that modern science has smuggled in elements of the metaphysical distinctions from the modern era.

The dualism inherent to Cartesianism inspired and incited a transformation of both philosophy and science. Subjectivity is a limitation on possible knowledge for both Cartesianism and positivism; we cannot measure the correspondence of our knowledge to the world-in-itself, since we only have access to the way things are for us. Subjective phenomena, which are largely non-quantifiable, are either translated into the language of physical bodies or dismissed altogether by science as a valid object of inquiry. Optimistically, the mind is "an invisible 'thing,' which is found somewhere behind certain living bodies and…the only problem is to find the correct angle for observation."[172] Pessimistically, if science cannot find a correct angle for

168Merleau-Ponty. "Eye and Mind." *The Merleau-Ponty Aesthetics Reader.* Ed. Galen Johnson. Trans. Michael B. Smith. Evanston, Illinois: Northwestern University Press, 1993. 121
169Ibid.
170Merleau-Ponty. *The Visible and the Invisible*. Evanston, Illinois: Northwestern University Press, 1968. 18
171Ibid. 14
172Ibid. 19

observation, however, the subjective phenomena is dismissed as un-real. Thus, even regarding subjective phenomena, the scientist still strives to be an absolute spectator, completely disentangled from the world, which remains as "the Great Object."[173] Of course, Descartes overcomes the ontological gap between the immanently perceived and the transcendentally real via God to achieve indubitable knowledge. Modern science, which works only *a posteriori*, does not have this recourse. Human existence, insofar that science is concerned, can only be analyzed in terms of its quantifiable and observable aspects. The application of operational thinking to human existence is, for Merleau-Ponty, however, a sign that we are entering "a cultural regimen in which there is neither truth nor falsehood concerning humanity and history, into a sleep or nightmare from which there is no awakening."[174] This nightmare is the crisis to which Husserl alerted us; this nightmare is a world that does admit of any rationality besides the numerical.

Merleau-Ponty rejoins Husserl when he states that "philosophy maintains itself against such operationalist thinking."[175] Merleau-Ponty and Husserl would agree that Cartesianism is the root cause of both the tacit dualism in modern science *and* is the necessary intellectual predecessor of the very means by which to overcome that dualism. Hence why Merleau-Ponty says, "our science and our philosophy are two faithful and unfaithful offshoots of Cartesianism, two monsters born of its dismemberment."[176] The goal of phenomenology is to mend the wounds that have severed philosophy from science and science from itself. Philosophers must fulfill what Husserl calls our "functionary role" by learning from the history that he presented in the *Crisis* - the same history that Merleau-Ponty elaborates upon. This history will help science to ground

173Ibid.15
174Merleau-Ponty, *Eye and Mind* 122
175Ibid. 138
176Ibid. 138

itself upon the things themselves, so that it "will once more become philosophy."[177]

Merleau-Ponty's contribution to Husserl's history is the analysis of an additional paradigm shifting scientist, whose impact is at least equal to Galileo. Albert Einstein's formulation of the theory of relativity indicates to physics, on the virtue of its own method and description, that science must take into account the relationship between the observer and the observed.[178] There are manifold implications for Einstein's discovery. First, that distance and time are relative to a particularly situated entity within the world disintegrates the positivist notion, carried over from Galileo and canonized by Descartes, of a purely geometric space within which science can make predictions about bodies that move according to universal necessity. Now, arguments have existed since Zeno that demonstrate the inherent paradoxes of geometric spaces as such. What is unique to Einstein's reformulation of space and time is that he did not come to abandon the geometric model of space using *a priori* reasoning, as Zeno and others had done. Einstein relied on observation to show in the inadequacies of the geometric model; physics made observations that uprooted its own methods and worldview. The observer is no longer a disembodied Absolute Mind that surveys like a god from all possible angles and captures the being of an object in its entirety. Since the notion of a complete and total knowledge of the physical world, independent of all human existence, is no longer possible in light of Einstein's discoveries, the positivist stranglehold on rationality loosened. The theory of relativity contrasts the ideal constructions of science against the concrete world of perception in which we live. Henceforth, "for science itself: "objective" and "subjective" are recognized as two orders hastily constructed within a total experience, whose context must be restored in all clarity."[179] As a result,

177Ibid. 123
178Merleau-Ponty, *The Visible and the Invisible* 15
179Ibid. 20

Merleau-Ponty explicitly "calls for the revision of our ontology, for the re-examination of the notions of "subject" and "object."[180]

Merleau-Ponty's task in *The Visible and the Invisible* is the elucidation of this 'total experience,' from which our traditional notions of objectivity are derived. Merleau-Ponty claims that science, "far from dissipating the obscurities of our naive faith in the world, is on the contrary its most dogmatic expression."[181] Science, like all human praxis, relies upon *perceptual faith*. Perceptual faith is a belief in the existence of the world and from this faith and this world we develop a notion of truth and falsehood, which is the foundation of the notion of objectivity – a truth valid for everyone. The subject-objective dichotomy, which has led science to dismiss as irrational any investigation into the 'subjective', is merely a "cognitive adequation of the relationship with the world and with ourselves that we have in the perceptual faith."[182] There is some truth to the thesis of subjectivity, that our knowledge of the world-in-itself is limited because we only encounter the world as it appears to us, though. The fundamental truth to the thesis of subjectivity is that there is a certain immanence to phenomena, which ties the world to us with all of our finite attributes. The notion of know a thing-as-it-really-is-in-itself would require an infinite perception or, as Merleau-Ponty scholar M.C. Dillon puts it, " a perception of the thing from all sides and through the history of its being."[183] He rightfully adds, "this is not a possible human perspective."[184] The limits of our knowledge are bound to our finitude as temporal, cultural, intersubjective, and incarnate beings. Knowledge of reality, then, cannot be the god's-eye view that modern science hoped to achieve. We can only understand "this phase of

180Ibid. 23
181Ibid. 15
182Ibid. 23
183Martin C. Dillon.. *Merleau-Ponty's Ontology, 2nd ed.* Evanston, Illinois: Northwestern University Press, 1998. 89
184Ibid.

[a thing's] becoming....[since] it is a mark of the real to become, to unfold."[185] Knowledge is limited to the finitude of the human observer and by the transience of phenomena. The product of scientific investigation cannot be, as the positivists held, eternal knowledge of reality. Therefore, instead of an ontological *difference* between subjective (ephemeral) and objective (eternal, *real*) orders of reality, Merleau-Ponty new ontology establishes a hierarchy of abstraction: the world of perception, which is the pre-objective and intuitable world of Husserl, is the foundation of the world of science, which is an idealized expression of the world of perception. Modern science has committed a fallacy of reification by claiming that the abstract and second order world of science is true reality when, in fact, it relies upon a world of perception that comes before it and makes it possible.

Merleau-Ponty's critique of dualism in science, however, is not a rejection of the usefulness of scientific investigations. Science does and will have a place in human existence, rather "the question is whether science does, or ever could, present us with a picture of the world that is complete..."[186] Science is an analysis of the world of perception. Any analysis is, in principle, to break something apart into component parts. An analyst must decide how a complex whole, in this case the pre-objective world, is to be broken up and this decision (de-cision, to cut apart) "necessarily precludes another equally important kind of understanding: an understanding of the thing's dynamic life as a whole."[187] An analyst breaks apart a complex whole in a particular way that is determined by their *goal* – what they want to understand about the whole. Thus scientific analysis is *just one* perspective on the world of perception. That science is perspectival instead of being perched from a god's-eye view of reality is in direct conflict with the

185Ibid. 91
186Merleau-Ponty. *The World of Perception*. London, England: Routledge Press, 2008. 43
187Hass, Lawrence. *Merleau-Ponty's Philosophy.* Bloomington, Indiana: Indiana University Press, 2008. 45

earlier notion that science produces de-authored, universal knowledge without any human bias. Science is not exhaustive of reality, nor is any particular philosophy. Hence, "expressing what exists is an endless task."[188] Those topics formerly attributed by positivism to the subjective realm, then, are not irrational; they are simply not taken into account by the scientific analysis of the world of perception. It should come as no surprise at this point that one such overlooked category of phenomena is the social. It is philosophy's task to elucidate the world of perception in which the social is a reality.

I am proposing that Merleau-Ponty has two major contributions to the understanding of social phenomena. First, Merleau-Ponty accounts for human behavior in terms of our interactions within the world of perception. Our actions are not subsumable under general laws; humans act within their *existential situation*. Second, he proposes a structuralist understanding of society that replaces positivist models of social systems. The relationship between mankind and the structures of society is what give our behavior *meaning*. Social inquiry is, as Winch had dreamed, rightfully within the domain of philosophy and can generate an understanding of meaningful behavior. Most importantly, a phenomenological approach to human existence and our relations with others enables the possibility of an ethics. Only through the embrace of this new form of rationality can the Western spirit finally overcome the crisis and learn how to live in light of our knowledge.

The social is an element of all experience. It is "a fundamental structure of experience….a permanent field and ever-present horizon to all subjectivity and all action, in the same way as the world is the permanent horizon to all perception."[189] Additionally, society reveals and is

188Merleau-Ponty. "Cezanne's Doubt." *The Merleau-Ponty Reader*. Eds. Ted Toadvine and Leonard Lawlor. Evanston, Illinois: Northwestern University Press, 2007. 75

189Spurling 85

sustained by intersubjectivity. As Winch and Wittgenstein have taught us, intersubjectivity is a necessary condition of meaningful behavior. The meaning of a behavior is a function of the interplay between an individual's intentions for their action and how Others, who are revealed as a primordial structure of experience, respond to it. [190] In phenomenology, this interplay is called an *existential situation*. The concept of situation "allows us to speak of an individual in relation to other individuals, and in general terms of social groupings insofar as they exist in the common experience and praxis of individuals."[191] Situations are, in principle, ambiguous for a variety of reasons. First, an individual's intentions are part of their own situation since "one does not step into a pre-given situation like a suit of armor."[192] Second, some situations are a cause for acting in a particular manner, while others are passively submitted to.[193] Merleau-Ponty uses as an example the situation of the proletariat; their situation may spur on action if they are sufficiently class conscious and believe themselves to be exploited by the owning class.[194] Lastly, the meaning of a situation changes over time. As Laurie Spurling creatively puts it, "What I may take as my present situation, for example, of being 'comfortably off' on $7,000 a year, I might well see as a situation of extravagance if I later become a religious convert, or go bankrupt."[195] Taken together, these ambiguities require social theorists to invest their own point of view in order to make a situation meaningful. Hence, "situations do not exist 'out there' as 'social facts': they are ways of understanding people in society which are open to different interpretations depending on the assumptions and practice interests of the theorist."[196] The ambiguities of situation are not a valid

190Ibid. 86
191Ibid. 88
192Ibid.
193Ibid. 89
194Ibid.
195Ibid.
196Ibid.

reason to discount our investigations of them. They are an invitation for more radical theorizing, which take into account the relationship between the theorist and theorized.

Jean-Paul Sartre calls existential situations "the meeting-point of man's facticity and his freedom."[197] Unlike the social constructs of positivist sociology, which conceives of individuals as role-players who act in conformity to normative or expected patterns of behavior, a phenomenological analysis of the social reveals that an individual has great freedom to transform his situation and his society by being creative or innovative.[198] Now, there certainly is an objective aspect to social life, which Weber argued could help foster an understanding of the meaning of a behavior. Merleau-Ponty says that we must recognize a "an average and statistical significance to our projects," a significance not conferred on them by ourselves.[199] This was the focus of positivist social science but it should not be the *end* of social inquiry. This objectivity is the facticity that Sartre believes is one pole of our existential situation. The other is freedom - another structure of all experience that enables behavior to be meaningful and, moreover, is the foundation for an existential ethics. Freedom, for Merleau-Ponty, "means simply that there is no human nature in man which pre-determines the pattern of his life, and that man's life is not the product of physical or social determinism but a dialectic enacted between man and his environment."[200] This freedom is not absolute, in the Sartrean sense of freedom, but *incarnate*. As embodied beings, there are aspects of existence that are not of our own choosing - obstacles that prevent us from reaching our goals. Freedom is always limited. Freedom, however, allows us to transcend the given. Merleau-Ponty defines man by "the capacity of going beyond created

197Jean Paul Sartre, 1969. Quoted in Ibid. 88
198Ibid. 87
199Ibid. 86
200Ibid. 119

structures in order to create others."[201] Freedom is the ability to create, to express, to innovate instead of freedom from external forces. This freedom gives us the ability to change our situation by changing its significance.[202][203]

> If man is the being who is content to coincide with himself like a thing but represents himself to himself, sees himself, imagines himself, and gives himself rigorous or fanciful symbols of himself, it is quite clear that in return every change in our representations of man translate a change in man himself.

Merleau-Ponty's analysis reveals to us that freedom is a "rooted creativity," an ability to act upon and transform our world and our meanings. Positivism can only explain human life in terms of total determinism. Phenomenology reveals our ability to respond to our environment and *change* it.

Merleau-Ponty conceptualizes individuals not as actors or role-players in a grand social system, which forces the actors to perform predefined roles, but as incarnated beings in an existential situation. The hallmark of this situation is the freedom to transcend the given and to create new significations. This is Merleau-Ponty's sociological phenomenology. But Merleau-Ponty also inverts the terms, creating a phenomenological sociology. Merleau-Ponty employs the concept of *structure* to understand society as a whole. Structure is the most general system of reference one can have of a given society and integrates both the point of view of members of the society and the theorist. Structure is an over-arching situation:[204]

> the sociologists equations begin to represent something social only at the moment when the correlations they express are connected to one another and enveloped in a certain unique view of the social and of nature which is characteristic of the society under consideration and has come to be institutionalized in it as the hidden principle of all its

201 Merleau-Ponty, *Structures of Behavior* 175.
202Quoted in Spurling 121
203Merleau-Ponty, *Signs* 225
204Ibid. 117. Also found on Spurling 90.

> overt functioning – even though this view may be rather different than the official conceptions which are current in that society.

Structures are connecting principles behind a large number of social meanings. An analysis of structure, however, must remain connected to lived experience – the world of perception. As such, the point of view of individuals within the given society must be taken into account; these individuals must be able to recognize the elements of, although not necessarily agree with, the structure about which the sociologist is theorizing. Hence, "the specification of a structure by the theorist has always something provisional about it. It represents the theorist's most comprehensive understanding to date, but not for all time, and his model is always subject to revision."[205] Or, as Merleau-Ponty put it, "there is no question of substituting the model for the reality."[206] The tentative nature of sociological theorizing is not due to an inadequacy in method, as positivism would suggest; the tentative nature of all theory is the result of our finite Being and our connection to transient phenomena.

Merleau-Ponty's conception of existential freedom permits the possibility of an ethics. With the freedom to change the significance of one's situation, one can take responsibility for their actions and their situation. Existential ethics are contextualist because it does not recognize objective values; "all values are context-dependent."[207] In *Sense and Non-Sense*, Merleau-Ponty writes that:[208]

> True morality does not consist in following exterior rules or in respecting objective values: there are no ways to be just or to be saved…the value…consists of actively being what we are by chance, of establishing that communication with others and with ourselves for which our temporal structure gives us the opportunity and of which our liberty is only the rough outline.

205Ibid. 90
206Merleau-Ponty, *Signs* 117
207Ibid. 125
208Merleau-Ponty, Sense and Nonsense 40. Quoted in Spurling 125.

To be ethical is not to adhere to any particular set of behaviors that correspond to objective values. Ethics is an attitude of evaluation and self-evaluation that seeks to understand why we act the way we do. The positivist worldview, that reality is that which conforms to the specific methods of scientific practice, can never arrive at this conclusion. Human action can only be understood as the reaction to certain governing laws and the origin of these laws is outside the scope of rational inquiry. In positivism, we are doomed to follow, with logical necessity, the laws of the universe and cannot be held accountable for our actions. It is no surprise, then, that science has placed our entire culture in crisis. Science dismisses as irrational any attempt to tell us how to live. Our inquiries into the social world can only have meaning through a radically different way of theorizing – phenomenology – through which the concrete individual and their relations to the world can be elucidated.

Conclusion

Our greater Western cultural horizon, the interworld between C.P. Snow's Two Cultures, is in crisis because we deny ourselves the ability to answer the questions that we find most burning. Science alone cannot help us understand human existence, its meaning or meaningfulness, because of methodological concerns. The scientific rationality demands that genuine knowledge starts from observable phenomena and generalizes, in the format of a general law and according to some force of necessity, to the universal character of the world. The whole of human existence is not observable since we all have a psychic life that is uniquely our own, nor does it operate according to any necessity. Moreover, the formulation of human actions

in terms of covering laws comes at the expense of a radical transformation of meaning. Despite the difficulties in application here, any other rationality besides the scientific is dismissed as superstitious, illusory, or irrational.

There comes a point, however, when the inadequacies of the scientific rationality must be thematized and alternatives must be presented. To find an alternative to the scientific rationality is not to destroy it unless your conception of science requires that science be an exclusive form of knowledge generation. Throughout the course of this paper I have shown just a few of the fundamental inadequacies with the scientific rationality. These inadequacies become most apparent when one examines scientific explanations of the social world. We discover that science saddles its conception of the social world with its methodological quirks instead of going to the root source of sociality itself, lived experience, to establish a conception of the social world.

Concerning the social world, we cannot rely on empirical evidence to justify our conception of reality. The social is a reality that is built upon concepts and concepts are not empirical. Wittgenstein's investigations into language reveal that reality is not what gives language its sense; quite the opposite, language makes reality sensible. Science cannot teach us about concepts or their application, since a conception of reality must already be presupposed before we are able to evaluate scientific expressions.[209] Science, therefore, is of a second order; as Merleau-Ponty illustrated in *The Visible and the Invisible*, science is an abstraction from a primordial sensibility. While any philosophy, as an *a priori* endeavor, can comment on concepts and how we use them, only phenomenology is the elucidation of the primordial sensibility from which we learn about the social, truth and falsehood. Phenomenology is the philosophy best suited for understanding the social world because, through its clarification of the perceptual

209 Peter Winch. "Understanding a Primitive Society." *Understanding and Social Inquiry.* Ed. Dallmayer 172

world, it can account for the meaning of social action in terms of intersubjectivity, situation, freedom, and structure. As Peter Winch has shown us, any account of the social world requires us to go beyond traditional notions of subject and object. Meaning cannot be accomplished between two radically isolated subjectivities; intersubjectivity is essential for rule-governed behavior and the degree of compliance with the rules makes behavior meaningful. In addition to clarifying the foundation of sociability in lived experience, phenomenology is present at the birth of values. Human existence is characterized by a "rooted creativity," meaning that we are simultaneously bound by forces outside of our control and free to transcend these forces. Our freedom comes with great responsibility. We are liable for own actions and significations; our situation is not entirely outside of our own control. Phenomenology, however, does not go so far as to propose any particular values as fundamental to its ethics since these values are not found in the perceived world. A phenomenological ethics only, but importantly, requires an agent to be self-conscious of their own situation and their powers of transcending it. Moreover, one's situation is essentially intersubjective; there is no escaping our responsibility to Others, who are a literal extension of ourselves.

The current crisis debate within the American Anthropological Association is the result of an imperialistic cultural movement that seeks to make science the exclusive source of knowledge generation despite its inadequacies in explaining some aspects of human existence. One characteristic of modern science, even social science, is that it must de-authored. The positivist program, after all, states that all knowledge must be completely free of personal bias. This, of course, is impossible. Language reveals that even the most accurate description is never entirely free from subjective evaluation and vice versa. Moreover, it is fundamental that all analysis

necessarily includes a perspective; only select elements of the complex whole of reality are selected for examination and deemed worthy of knowing. Regardless of these arguments, science is not concerned with the relationship between the theorist and the theorized. Science is not reflexive. The scientist's disinterest in their own theorizing prevents scientists, even social scientists, from being able to look at science itself as a cultural configuration.

C.P. Snow was right on when he claimed that "the scientific culture really is a culture, not only in an intellectual but also in an anthropological sense."[210] Something can appear rational only in terms of an agent's understanding of what is and what is not rational in their own culture. Hence when scientists dismiss alternative rationalities as superstitious, illusory, or irrational, they have the weight of their own culture behind them.[211] What scientists do not seem to understand is that other universes of discourse exist that are different from their own but that can be intelligible and make the world intelligible. These other rationalities provide clear ways of deciding what beliefs are and are not in agreement with their conception of reality.[212] If a scientist wishes to understand the meaningful behavior of a foreign people, then this scientist must not hold the beliefs and practices of the foreign culture up to the criteria of rationality for the culture of science; surely they will appear irrational. Social inquiry must seek to elucidate the rules that govern meaningful behavior, even if the rules are foreign to our Western sensibilities. The crisis in the sciences can only be remedied when science itself becomes reflexive and realizes its place as a cultural accomplishment. Science is just one window on human experience; scientists "must seek to avoid putting scientific knowledge above knowledge obtained through other means."[213] Only then will science be genuinely able to understand society and the discipline of

210 Snow 171
211 Winch, *Understanding a Primitive Society* 164
212 Ibid. 163
213 "On Being a Scientist" 21

anthropology have all of the tools available to it.

The historical survey which we have undertaken over the course of this paper leaves knowledge in very different place than where it began. We can no longer carry around the illusion of progress, that through the application of the scientific method comes a total mastery of the universe. Knowledge is no longer moving forward. Moreover, if phenomenology is the *entelechy* of a historical dialectic between philosophy and science, then the highest point of reason is "to realize that the soil beneath our feet is shifting" and that investigations into reality are "only trudging in a circle."[214] We might be disappointed with this outcome, but it is only because we have been mislead for so long to believe that a positivity of knowledge was possible. We cannot establish a hierarchy of civilizations or speak of progress at all, because, in a sense, every civilization and all knowledge goes to the furthest reaches of the future. No society is perfect, nor can knowledge be total, in the same sense that no painting completes the task of painting.

214Merleau-Ponty. "Eye and Mind." *The Merleau-Ponty Reader.* Ed. Ted Toadvine and Leonard Lawler. Evanston, Illinois: Northwestern University Press, 2007. 378