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Nietzsche's Unconscious and Nineteenth-Century Thought

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Abstract of the Thesis

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This thesis is a summary of the influences that contributed to the creation of Nietzsche's idea of the unconscious. It explores what thinkers contributed to the formation in historical progression, partially exploring the genesis of Nietzsche's idea. Most of the thinkers are scientific thinkers, and much of the influence comes out of nineteenth century science. I include early influence from Arthur Schopenhauer and F. A. Lange as well as his reading of the early Greek philosophers inspired by Lange and Schopenhauer, which includes Heraclitus, Empedocles and Democritus. I also discuss some of the psychological thought of his day, especially L. F. Von Helmholtz, Theodor Fechner and Eduard von Hartmann. I also look at the biological theory of his day, especially the German reaction to Darwinian Evolution, including Wilhelm Roux, Carl von Nägeli, William Rolph and Ernst Haeckel. There is also some discussion of the influence of physical theory, especially from Roger Joseph Boscovich, as well as Karl Ernst von Baer and Johann Karl Friedrich Zöllner. I attempt to show how all of these thinkers played a part in the formation of Nietzsche's idea of the unconscious and that we can both understand Nietzsche's originality and his indebtedness and timeliness through an understanding of how he was influenced by contemporary thought.

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Introduction

Nietzsche's understanding of the human unconscious, of what mental activity occurs outside of conscious awareness, evolved over the arc of his productive career through a combination of independent thought and external influence. Right now I want to focus on that external influence, not precisely at the exclusion of understanding his independent thought and his originality, but in order to illuminate the complexity of his understanding of consciousness and unconsciousness—that which is excluded from consciousness. I'm hoping to look at Nietzsche's thought on consciousness/unconsciousness roughly chronologically so we can follow the embryological growth of his earlier, relatively simpler thoughts as they complicated and deepened.

In order to supply a framework for the context of these influences I will provide a set of critical dates in Nietzsche's life. He was born in 1844; his father died when he was five. He studied at Pforta, 1858-64 and then begins advanced education at Bonn University, briefly, studying theology and classical philology. In October 1865, he continues with classical philology at Leipzig. He has a short stint of military service in 1867-68, cut short by injury. He is offered a professorship at the University of Basle in Switzerland, in 1869, at the age of 24, and gets promoted to full professorship in 1870, and then unsuccessfully applies to become *philosophy* chair in 1871. In 1870 he has a short stint as a medical orderly in the Franco-Prussian war, and his previously poor health and regular illness evolves into almost continuous poor health for the rest of his life. He publishes his first book, *Birth of Tragedy*, in 1872; it receives an icy reception. He continues lecturing at Basle but the *Birth of Tragedy* has marred his reputation and the students have fled. He resigns from his position in 1879, and begins his period of wandering through Europe, partly in search for places more agreeable to his persistent ill-health. This is his most productive period in terms of published work. He finally collapses in January 1889, and continues the next eleven years in mental and physical incapacitation, until he dies in 1900.

I will not be focusing on how his particular states at these time periods may have influenced his thought, but will be focused more on how what he read influenced his thought, but nonetheless I think it is useful to set a structure in which to view Nietzsche's progression from his beginning in Schopenhauer to his end in "will to power."

Schopenhauer

The place where we can set up a beginning is in that crucial last phase of his philological training at Leipzig. It is here that he begins his familiarity with Helmholtz, dating back as early as 1865.¹ It is here that he reads Friedrich Albert Lange's History of Materialism [*Geschichte des Materialismus*] in 1866. But where I want to begin is with Nietzsche's discovery of Schopenhauer in 1865. He describes the discovery enthusiastically, as an almost fateful coincidence at an antiquarian bookshop, "I do not know what daemon whispered to me: 'Take this book home with you'. . . . At home I threw myself into the sofa corner with the treasure I had acquired, and started to allow that energetic, sombre genius to work upon me."² Throughout his early years, the influence of Schopenhauer is everywhere in his thought (even if he could never allow himself to quite accept Schopenhauer uncritically³: in *Birth of Tragedy* (1872), the influence of Schopenhauer (as well as Richard Wagner, who is also quite influenced by Schopenhauer) saturates the pages; among the "Five Prefaces to Five Unwritten Books" that Nietzsche sends to Cosima Wagner in December 1872⁴ is one on "The Relation of Schopenhauerian Philosophy to a German Culture," though it is admittedly far more about German Culture than Schopenhauer; the essay "Schopenhauer as Educator" (1874), third of his "Unmodern Observations," discusses his enthusiastic influence from Schopenhauer the thinker and his affinity for Schopenhauer the man. The end of Schopenhauer's influence comes in a dramatic letter to Cosima Wagner in December 19, 1876: "Would you be amazed if I confess that something has gradually come about . . . a disagreement with Schopenhauer's teaching? On virtually all general propositions I am not on his side"(Janaway, *Nietzsche and the German Tradition*, p 155). We, of course, shouldn't trust the hyperbole of this statement (Nietzsche was probably never able to completely abandon Schopenhauer's influence, even if he thought he could), but it is representative of a gradual turn away from Schopenhauer, culminating in the decision he voices in this letter.

¹ "Nietzsche had read Helmholtz as early as 1865, when he was only twenty-one years old, and he continued to purchase Helmholtz's works as soon as they appeared," (Whitlock, *The Pre-Platonic Philosopher* [PPP], p 214).

² quoted from Christopher Janaway. "Schopenhauer as Nietzsche's Educator." *Nietzsche and the German Tradition*, p 159.

³ In a Fragment from 1868, Nietzsche writes, referring to Schopenhauer: "The errors of great men are worthy of honour because they are more fruitful than the truths of the small. . . . how on earth someone with a system so full of holes could arrive at such pretensions" ("On Schopenhauer," Janaway, p 260, section 1)

⁴ A collection of five short essays was sent to the Richard and Cosima Wagner, specifically as a Christmas present for Cosima. They are five prefaces without a work to preface: thus appearing as five sketches for future works, or five short essays (in Grenke's introduction to *Prefaces to Unwritten Works*, "A Gift for Cosima," he argues for considering them as one complete work).

It is credible that Kant probably originates the idea of unconscious in the Western tradition,⁵ since Kant's belief in the filtration of raw data through the categories of perception creates a non-conscious activity of the mind—namely, this filtration process itself. And Schopenhauer, as influenced by Kant, certainly carried over some of these ideas.

How these ideas from Kant appear in Kant is that Schopenhauer gives a kind of materialist account the self, but he wants to avoid a one-sided portrait of the self that might reduce it to pure non-materiality, or a one-sided portrait that might reduce it to pure materiality.⁶ He calls these two one-sided standpoints the *subjective* (pure non-materiality)⁷ and the *objective* (pure materiality)⁸, and decides that a balance between them must be struck: “it is just as true that the knower is the product of matter as that matter is the mere representation of the knower; but it is also just as one-sided. For materialism is the philosophy of the subject that forgets itself in its own reckoning”(Schopenhauer, vol 2, p 13).

Furthermore, there is a distinction between the intellect, which is the conscious, sophisticated part of the self, and the will, which is the primitive part. “The self is a kind of compound of the will and the intellect,”⁹ which interacts in a strange interplay within us (Schopenhauer, vol 2, p 207). It is the will that provides our drives and passions and desires; the will colors our perceptions. It secretly guides our behavior and impels us towards what it desires: “The will is here a part of the individual's mind which adopts attitudes and guides overt behaviour despite remaining out of sight of the conscious intellect”(Janaway, *Schopenhauer*, p 49). And yet it can hide things from the intellect, color information, and impede the intellect's judgment. It is a powerful motive force that frequently gets in the way of well-motivated action.

To sum up, insofar as it is relevant to Nietzsche and his notion of the unconscious: the self is an entity that cannot be entirely reduced to either the material or the non-material, and thus is intimately tied with the physiological, and, furthermore, is guided in many ways by a non-conscious charioteer called the will.

Before I start to talk about echoes in Nietzsche's thought, I also want to continue forward to F. A. Lange's *History of Materialism*, since there is much overlap between Lange and Schopenhauer, and since Nietzsche first read Lange shortly after first reading Schopenhauer and continued to be influenced by both for a long time.

⁵ Ronald Mather says Kantian philosophy originates the consciousness/unconsciousness divide in occidental thought: “With Kant there is a clear demarcation between the essentially conscious activity of self-reflection (and reflection in general) and the unconscious principle of structural unity underlying that activity.” (p 66). Nietzsche suggests Leibniz, even before Kant, might have been aware of the unconscious, which was only in Nietzsche's day finally being confirmed by scientific evidence: “it took them two centuries to catch up with *Leibniz's* suspicion which soared ahead”(GS 354[*Gay Science*, all references are by section number]).

⁶ Cf. Janaway. *Self and World in Schopenhauer's Philosophy*, pp 181-183

⁷ Subjective: consciousness is the given; moves outward from within; and shows “the mechanism through which the world presents itself in consciousness”(Schopenhauer, vol 1, p 272).

⁸ Objective in contrast: starts from the outside, taking “as its object not our own consciousness, but beings given in outer experience. . . . The standpoint of this method is empirical: it takes the world and the animal beings present in it simply as given, using them as its starting-point”(ibid.)

⁹ Janaway, *Schopenhauer*, p 46. Cf pp 46-53 for a discussion of the will/intellect divide, and Schopenhauer's basic notion of the unconscious.

Lange and 19th Century Psychology and Physiology

Friedrich Albert Lange (1828-75) published the first edition of *The History of Materialism and Criticism of its Present Importance* in 1866, and in that year Nietzsche first got his hands on it. It is a broad description of the history of scientific thought, beginning all the way back with the ancient Greeks, focusing on advances made towards *materialistic* scientific understanding of the world—explanations that eschewed theological or metaphysical or teleological explanations. The book was a treasure house for Nietzsche, which he regarded as “the most significant philosophical work to have appeared in the last hundred years.”¹⁰ Nietzsche remarks in 1866, in a letter to Herman Muschacke: “Kant, Schopenhauer and this book by Lange—more I do not need.”¹¹ To further emphasize the importance of Lange and Schopenhauer we should note that Nietzsche was little familiar with Kant firsthand,¹² and was influenced by Kant primarily secondhand, through people like Lange and Schopenhauer.

Lange and Schopenhauer were the two thinkers that were responsible for turning the young Nietzsche away from philological studies,¹³ which by that time he had exhausted of all its surprises and interest, to philosophy, which would ultimately prove far more inexhaustible. Nietzsche discovered Lange, along with Schopenhauer, during that second phase of his classical philology training, at the University of Leipzig, initially believing that Lange was in many ways *confirming* and proving, through new scientific understandings, ideas of Schopenhauer.¹⁴ He continued reading through Lange and got a hold of and read the later expanded edition of Lange’s *History* into the 1880s,¹⁵ which

¹⁰ Stack, *Lange and Nietzsche*, p 10. This would imply that it has already superseded Schopenhauer, but again Nietzsche is exaggerating. In Nietzsche’s letter to Hermann Muschacke from November 1866, written shortly after his initial discovery, he calls it merely the best book of the past *ten* years: “The most significant philosophical work to appear in the last decade is without a doubt Lange, *History of Materialism*”

¹¹ *KGB* I/2, November 1866. I am quoting from Brobjer’s “Nietzsche’s Reading and Knowledge of Natural Science: An Overview” in *Nietzsche and Science*, p 26

¹² “Nietzsche appears to have read little by Kant firsthand (except the third *Critique* . . .). But he did read a large amount of secondary material about him,” Brobjer, *Nietzsche & Science*, pp 26-27. Stack: “Nietzsche was indirectly influenced by Kant *via* the basically neo-Kantian orientation of Lange” (*Lange and Nietzsche* 20).

¹³ Stack also contends that, “Lange was instrumental in turning [Nietzsche] away from metaphysical speculation.” (*Lange & Nietzsche* 21)

¹⁴ Nietzsche writes to Carl von Gersdorff, August 1866: “Schopenhauer must be mentioned, for whom I still have every sympathy. What we possess in him was recently made quite clear to me by another work, which is excellent of its kind and very instructive: F. A. Lange’s *History of Materialism*” (*Selected Letters of Friedrich Nietzsche*, p 18).

¹⁵ He read the first edition of Lange’s *History* in 1866, and then the much expanded edition of 1873 in 1882, [Müller-Lauter, p 232] reading it repeatedly and making notes from 1883-1888, though his last sustained burst of reading in natural science peaks in 1881, and peters off, with very little reading in natural science after 1883 [Brobjer, *Nietzsche & Science*, p 38-40].

introduced him to even newer fields of thought. Nietzsche was introduced, through Lange, to a number of ideas and thinkers, especially in more scientific fields: the physical theory of Roger Joseph Boscovich, which I will discuss later on; research in psychology and physiology; evolution and Darwinian theory. Nietzsche was also reintroduced, through Lange, to the early Greek philosophers, putting them in a scientific history and introducing them as *natural* philosophers. Lange reintroduced them to Nietzsche as natural philosophers, reintroduced through them through the lens of the history of science (I will return to the pre-Platonics a bit later).

For now, it is worth noting that the two philosophers most responsible for introducing Nietzsche to philosophy (Schopenhauer and Lange) also were responsible for introducing him to much contemporary science and probably also contributed to his burning interest in science during that early period. His heaviest readings of natural science come in sustained bursts in the 1870s and 80s, separated by lulls, in which he reads very little scientific literature. In 1888, Nietzsche reflects back upon his early philological training and the sudden interest that took a hold of him in the 1870s,¹⁶

how much time I had already wasted—how useless and arbitrary my whole existence as a philologist appeared in relation to my task. . . I had not learned anything new that was useful; I had forgotten an absurd amount for the sake of dusty scholarly gewgaws. . . A truly burning thirst took hold of me: henceforth I really pursued nothing *more* than physiology, medicine, and natural sciences. (*EH* “Human, All-Too-Human,” 3)¹⁷

Nietzsche even seems to suggest the value a thinker might gain from having studied science and having learned to think like a science, both in *Human, All too Human*, and *The Wanderer and His Shadow (WS)*.¹⁸ In this early phase of the mid 1860s while reading Lange and Schopenhauer, for Nietzsche philosophy and science were tied together and wrapped within one another. The period which is often referred to as Nietzsche’s “positivistic” period, in which he spoke with great confidence of the possibilities of science, and its general capacity to uncover truth and understanding, nonetheless, doesn’t really emerge in his published writings, until the late 70s,¹⁹ with

¹⁶ The quote is from *Ecce Homo*, talking about the time around writing *Human, All too Human*. Nietzsche began writing in 1876, published the first volume in 1878, the second piece (“Assorted Opinions and Maxims”, now volume 2, part 1) in 1879 and the third piece (“The Wanderer and His Shadow,” now volume 2, part 2) in 1880. He wrote *Ecce Homo* in 1888.

¹⁷ *Ecce Homo*, from *Basic Writings of Nietzsche*. References are by section name and number.

¹⁸ *HH* I: 256 and *WS*: 195 (*Human, All too Human* and *Wanderer and His Shadow*: references are section number)

¹⁹ Nietzsche began checking out books on Natural science from the Basel library beginning in 1873. Brobjer says he was interested in science mostly in 1875-82, his “middle period” (*Nietzsche & Science* 21), which ended some time before the publication of *Gay Science*, 1882, and starts in unpublished notes beginning around 1875. Robert Cohen says, Nietzsche “came to see that anti-scientificism can degenerate into emotionalism and irrationalism” and he originally turned to science “to battle Wagnerian culture and promote his more cosmopolitan vision in its place” (“Nietzsche’s Fling with Positivism,” *Nietzsche, Epistemology & Philosophy of Science* p 104). *Wagner at Bayreuth* (1876) provides the first hint of his anti-Wagnerianism.

Human, All Too Human (1878-80).²⁰ And even if he might come to reject aspects of science later in his thought, the importance of this early connection is definite, and becomes critical to the development of his theory of the unconscious.

Nietzsche sums up the physiological insights of Lange's *History* in a letter to Gersdorff in August 1866²¹, listing three primary points:

1. The world of senses is the product of our organization.
2. Our visible (physical) organs are, like all other parts of the phenomenal world, only images of an unknown object.
3. Our real organization is therefore as much unknown to us as real external things are. We continually have before us nothing but the product of both.

To begin to explain what here Nietzsche was seeing in Lange, let us begin with an important insight of Hermann L. F. Von Helmholtz (1821-1894)—who was a teacher of Lange and also quite influential to Nietzsche²²—called “the specific energy of nerves.” The basic idea is that a specific nerve is designed to respond to a specific stimulus and only that stimulus: “The optic nerve, e. g., may be pinched, heated, irritated by acid or electricity or light, but responds always only by the one sensation of light.”²³ Optic nerves only respond to light; taste buds only respond to specific tastes, etc.,. Somewhat later, Gustav Theodor Fechner (1801-1887), with his founding work in psychophysics, *Elemente der Psychophysik* (1860),²⁴ had experimentally demonstrated certain thresholds of sensation, such as the lowest and highest frequencies that ears can perceive, the smallest differences in brightness that can be perceived, the lowest quantity of light that can be distinguished from absolute darkness, and others. This undoubtedly does not exhaust the research available to Lange, but even with just these two insights it starts to become obvious that perception is not an open window onto the world, but represents a limited selection of available information—the physiology is limited in what it can receive, and perception is limited by the physiology. Helmholtz would continue this idea of specific energy, by imagining that a unit of energy is created by the stimulus striking the nerve, and this energy is transferred to the brain where it is registered using his

²⁰ E.g. *HH* 635, “On the whole, the procedures of science are at least as important a product of inquiry as any other outcome. . . . that instinctive mistrust of devious thinking, which as a consequence of long practice, has put its roots down in the soul of every scientific man.”

²¹ The same letter in which Nietzsche says Lange confirms Schopenhauer; cf. footnote 14 above.

²² Nietzsche had read Helmholtz as early as 1865 (mentioned earlier, footnote 1), before reading Lange, who he first read in 1866. Helmholtz influenced many of Lange's ideas, including the three that Nietzsche sums up in his letter to Gersdorff.

²³ Hall. *Founders of Modern Psychology*, p 253. Helmholtz's teacher Johannes Müller first developed the specific energy of the nerves (Bridges, “Doctrine of Specific Energies” p 57)

²⁴ Lange only alludes to Fechner's theory of psychophysics once (vol II, p 198), and, references his book once (vol III, p 153), but Fechner probably wouldn't appeal to Nietzsche, since Fechner believed in a physics of “tendency to stability,” which Lange references (vol III, pp 44 & 70). Lange does mention that Fechner was the editor of the *Zend-Avesta* (vol II, p 365), the primary text of Zoroastrianism, founded by the historical Zarathustra, which Nietzsche knew of.

famous idea of conservation of energy²⁵ to imagine that the energy of the stimulus is conserved from its external contact, translated to the nerve signal through the nerve ending, then passes through the body as energy to the brain.²⁶ Helmholtz notices that color is entirely a creation of sensation, a physiological creation of the eye;²⁷ contributing to this idea that we don't precisely see the world *as it is*. Helmholtz is also notable for first accurately measuring nerve time, the rate of movement of these sensations through nerve fibers.²⁸ In other words, not only are the perceptions narrowed, but they are also translated into nerve signals, then transferred, relatively slowly (thus limiting the rate of perceptions per second), elsewhere for further processing.

There is even further narrowing beyond this that Helmholtz recognized: namely, that the great preponderance of nerves is too much for the brain; thus it selects among sensations what it regards as useful. This process is called "unconscious inference": "impulses that do not deliver useful information are likely to be suppressed altogether unless called up by a special act of the will" (Meyering, *Historical Roots of Cog Sci*, p 150). The brain must necessarily limit this great volume of information in order to handle it, and thus further narrows it.

Influenced by Kant, Lange (and Helmholtz before him) interpreted these findings in a neo-Kantian framework. Kant proposes that the world in itself (the *noumena*, thing-in-itself, *ding-an-sich*) is filtered through categories of representation, and transformed into phenomena, which makes perception possible but also constitutes a barrier to perceiving the world in itself. Lange saw this physiological and psychological research as confirming these Kantian insights.²⁹ Lange asserts that our perception of the phenomenal world is anthropomorphic, (Moore, *Nietzsche, Biology, Metaphor*, p 98) in particular based on the idea of "unconscious inference," that we limit our perceptions to what is useful—since usefulness is defined as what is useful to us as humans.

This begins to sum up the first proposition of Lange that Nietzsche mentions in the Gersdorff letter: "The world of our senses is the product of our organization." Following from this, the next step is to look at, the limitations of self-perception

²⁵ He proposed what would later be termed the conservation of energy, in 1847, building on Julius Robert Mayer, who proposed a similar theory and was influential to Nietzsche.

²⁶ Helmholtz's conservation of energy, "provided compelling evidence that all of the energy expended by organisms could be traced to processes of material exchange, leaving no room for the positing of a special vital force" (R. Lanier Anderson, p 737). Helmholtz and other students of Müller, in 1845 swore a solemn oath to avoid vitalism.

²⁷ Nietzsche read an article in 1870 by Professor Czermak, which showed that Schopenhauer had actually demonstrated this idea of color before Helmholtz (*Selected Letters*, p 72)

²⁸ This is the late 1840s. Before Helmholtz's research, conservative estimates of nerve time were placed at several times faster than the speed of light; some believed the speed to be infinite. Helmholtz's measurement of 90 feet per second hasn't been revised that much.

²⁹ Neo-Kantianism of the mid nineteenth century tended to give a scientific/psychological spin on, and thus distort, Kantianism: "Contrary to Helmholtz's interpretation of it, Kant's philosophical enterprise was meant to be strictly transcendental. It did not aim at identifying any factual conditions that were claimed to be necessary for any experiential knowledge of reality at all. . . . transcendental knowledge would be invalidated if it rested essentially on empirical considerations. . . . In the mid-nineteenth century the predominant trend was to interpret Kant psychologically rather than logically. The essence of a priori knowledge was sought in its being conditioned by contingent psychological and physiological structures." (ibid, p 131-32)

necessitated by these limitations, since it is through these narrow windows of perception that we both look out on the external world and reflexively back upon ourselves (2: “Our visible [physical] organs are, like all other parts of the phenomenal world”). The limitations of these windows of perception necessitate limitations on how well we can perceive the limitations of these windows of perception,³⁰ which leads to (3): “Our real organization is therefore as much unknown to us as real external things are.” These insights are what Nietzsche is referring to when he says, “great natures with a bent for general problems have applied the tools of science itself, with incredible deliberation, to prove that all understanding, by its very nature, is limited and conditional”(BT³¹ 18).

The place where these ideas see their expression in Nietzsche thought, is first in “On Truth and Lying in a Non-Moral Sense” (1873).³² The translation of sensuous data into signals which our brain can perceive Nietzsche describes in this essay as a process of metaphor, of perceiving like to like: we perceive “the illusion created by the artistic translation of a nervous stimulus into images”(BT p 147). The stimulus strikes the nerve creating the nervous signal, which is transmitted to the brain and thereby translated to a verbal word; each one of these translations is like a metaphor: “The stimulation of the nerve is first translated into an image: first metaphor! The image is then imitated by a sound: second metaphor!”(BT p 144). Both Nietzsche and Lange give an aesthetic spin on this process of nerve stimulus by metaphorically comparing it to metaphor-making.³³ That we must understand this process of transmission and translation through the metaphor of metaphor-making (or through the metaphors of translation and transmission for that matter) is necessitated by the three arguments of Lange that Nietzsche sums up in his letter to Gersdorff: we can only see back upon our self through these metaphor-making senses which we use to see the external world.

While Nietzsche was at Leipzig, also teaching there was Johann Karl Friedrich Zöllner (1834-1882), whose book “*Über die Natur der Kometen*” Nietzsche read between 1872-74 (Moles p 22). It concerned more cosmological and physical issues, which became critical in the formation of Nietzsche’s “will to power,” but Zöllner also expressed an opinion on “unconscious inference” which he believed occurred by similar unconscious judgment as Helmholtz. Nietzsche rejected this mental automatism, preferring to imagine the unconscious as based on metaphors based on perceptions,³⁴ stating that unconscious inference “is no doubt a process of passing from *image* to

³⁰ Helmholtz seems to have recognized these limitations, which is why he advocated experimental research as a way around these limitations, or at least as a way to amplify the possibilities of such narrowed perception: “up till now psychology has used introspection as the only method for obtaining knowledge, whereas in this case we are concerned with mental operations about which introspection is utterly silent and whose existence is to be inferred, rather, from physiological investigations of the organs of sense.”(quoted from Meyering, p 181)

³¹ *Birth of Tragedy and Other Writings*. References to *Birth of Tragedy* are by section number.

³² References to “On Truth and Lying” will be by page number and refer to *BT*.

³³ Christian Emden notes “This physiological description of sensory perception as a translatory process is a common argument in nineteenth-century thought and can also be found in the writings of Hermann von Helmholtz, in Fechner’s treatise on psychophysics and in Hartmann’s study on the philosophy of the unconscious.” (“Metaphor, Perception and Consciousness: Nietzsche on Rhetoric and Neurophysiology” *Nietzsche & Science*, p 100)

³⁴ Cf. Small, *Nietzsche in Context*, p 63 & Emden “Metaphor, Perception and Consciousness,” *Nietzsche & Science*, p 93.

image”(PT, “The Philosopher,” 116)³⁵, continuing, “Our sense perceptions are based, not upon unconscious inferences, but upon tropes. The primal procedure is to seek out some likeness between one thing and another, to identify like with like”(ibid. 144). This unconscious thinking is a process of comparing sensations and drawing connections based on similarity and metaphor. Nietzsche rejects the lifeless mechanism of Zöllner³⁶ and Helmholtz, believing that metaphor is more human and more typical of human thought.

Nietzsche begins “On Truth and Lying” with the idea that language is metaphor, and continues: since language and words are the bearers of concepts, then concepts themselves become metaphors. He carries this all the way through, back to the origin of the concept, asserting that concepts are metaphors upon metaphors upon metaphors, which if they do touch back upon the world and “the mysterious ‘X’ of the thing-in-itself,” only do so through the intervention of all these intermediate metaphors in between.

The thing-in-itself “appears first as a nervous stimulus, then as an image, and finally as articulated sound,”(BT 145). It is Lange who first gives Nietzsche the notion of the connection between the thing-in-itself and the articulated word: noting that the electrical signals which act as the transmission of nervous stimuli to the brain, can also have a direct effect on and cause contractions in muscles; in particular the muscles of speech, the mouth and tongue. Thought itself is transmitted within the brain through electrical signals. Thus, there is an intimate connection between sensation and speech and between thought and speech. Nietzsche also found inspiration in Gustav Gerber, whose book, *Language as Art*, Nietzsche quotes in his lectures of ancient rhetoric (1872-73). Gerber believed that language had its origin in physiological processes of perception, establishing the connection, through electrical nerve signals, directly between sensation and speech. Namely, Gerber believed that there is a direct correlation between the nerve signals created by a sensation and the nerve signals used to impel our mouth to form the word we use to describe that sensation.³⁷

Nietzsche would also build upon the anthropocentric implications of these ideas. Our notions of science are anthropomorphic and only end up at self-understanding and self-perception, since all we see when we look into nature is ourselves; all we see in the phenomenal world is humanness: “All natural science is nothing but an attempt to understand man and what is anthropological . . . an attempt to return continuously to man via the longest and most roundabout ways”(PT “The Philosopher” Appendix, 2). Since it

³⁵ References to *Philosophy & Truth* are by essay and section number

³⁶ Interestingly, Zöllner, later in his career, became a firm believer in spiritism (Fechner was partially converted), believing that spirits moved through a fourth spatial dimension (Hall pp 265-67). Nietzsche attended a séance in October 1882 with Lou Salomé, presided by Madame d’Espérance, writing “Towards an explanation of so-called ‘spiritualistic phenomena,’” afterwards, which explained the phenomena of mind-reading and collective hallucination through the transference of electrical signals through the touching hands. He saw that spiritism and séances are likely an unconscious fraud—that no one is intentionally trying to deceive anyone, but all allow themselves to be deceived, saying “Ultimately it is *always* like this with all our actions. What is essential occurs unconscious to us”(Small, *Nietzsche in Context*, pp 72-73).

³⁷ Cf. Emden, *ibid.* Emden draws the connection between electrical stimulus and language that Nietzsche derived from both Lange and Gerber.

is we humans that are creating these metaphors and using these metaphorical tropes, they will be designed to be meaningful for us, and thus will reflect back on us in trying to understand nature.

Curiously, Nietzsche made the Schopenhauerean argument in *Birth of Tragedy*, that music is the direct expression of the will, beyond language.³⁸ In his short unpublished fragment of 1871, “On Music and Words,” he first expresses this idea and sets up language as, in many ways antithetical to music, noting,

words are symbols. But what do words symbolize? Surely, only representations, whether these should be conscious or for the most part unconscious. . . . Even the whole realm of drives, the interplay of feelings, sensations, emotions, and acts of will, is known to us when we examine ourselves most closely—as I must interpose against Schopenhauer—only as representation and not according to its essence”(p 107).³⁹

The idea of language as representation or metaphor is expressed here, as well as the unknowability of internal states, insofar as they must be expressed in language to be understood. But will, which is the subject of music, “in its utmost generality, is the primordial manifestation which includes all becoming”(p 110); thus, music expresses this becoming, which he equates with Schopenhauerean will. Music is capable of expression beyond language and representation and symbol systems. Music is the expression of becoming, of Schopenhauerean will, and the expression of non-representational unconscious. I don’t know whether he would still embrace these ideas in the late 1870s and into the 80s, but he does mention in *Beyond Good & Evil* (1886), “In music the passions enjoy themselves”(106), which implies that he has not completely abandoned some of his earlier ideas about music.⁴⁰

Before I continue with how these ideas of language and metaphor are carried forward and importantly find expression in *Daybreak* and *Gay Science*, I want to discuss Nietzsche’s lectures on the pre-Platonics first, which are given before his composition of *Daybreak* and *Gay Science*.

³⁸ Nietzsche includes an extensive quote in section 15, in which Schopenhauer makes the main argument: “music . . . is not a copy the phenomenon . . . but is directly a copy of the will itself.”

³⁹ Walter Kaufmann, trans. Page numbers refer to *Between Romanticism and Modernism*.

⁴⁰ Cf. also *GS* 106, “With music one can seduce men to every error and every truth.” *Genealogy of Morals (GM)* III:5 (I quote from *Basic Writings*, references are by essay number and section), speaks of Wagner’s use of Schopenhauer’s ideas on music. Metaphors in *GS* book five are suggestive, calling monological art the “music of forgetting”(367) and “a real philosopher no longer listened to life insofar as life is music; he *denied* the music of life”(372), and he compares a scientific understanding of the world to a superficial, formulaic understanding of music (373).

The Pre-Platonics

As I said before, Nietzsche was reintroduced to the early Greek philosophers by Lange, who presented them as natural philosophers, presented them through the light of nineteenth century science. Nietzsche was almost certainly well familiar with the early Greek philosophers through his philological training, but it is evident through his lectures that Lange, as well as Schopenhauer, pervaded his interpretations at this point. The Pre-Platonic lectures were either first delivered in 1869 to 1870 or in 1872 and continued until 1876.⁴¹ As was said earlier, 1872 began the period of his relative isolation from his academic peers⁴² and a heavy decrease in students. The earliest forms of these lectures were delivered before this time, and received with more interest, but, as he refined and expanded the lectures closer towards what we have in a surviving form today, there was a dramatic decrease in student attendance and general interest.⁴³

The influence of these early Greek philosophers upon Nietzsche is slightly more complex, since it would be difficult to say that any of the early Greek philosophers that Nietzsche studied had any notion of non-conscious thought, and it is apparent that Nietzsche does not attribute any such notion to any of them in this lecture course. On the other hand, the influence that more recent thinkers, especially Lange and Schopenhauer, had over Nietzsche's perception of the Greeks, colored his interpretation. Since both Lange and Schopenhauer would be influential in Nietzsche's theory of the unconscious, their influence allowed Nietzsche to integrate certain ideas from the early Greeks into thoughts that were becoming part of his thought on the unconscious. Thus, the influence of the Pre-Platonics is very indirect, but is important to note since the Greek thinkers were so important to Nietzsche.

Nietzsche portrayed the Pre-Platonics, especially Heraclitus and Democritus, as natural philosophers, making, during his lectures, seven excursions into natural science, which, if they are not to be attributed as off-topic digression, show how Nietzsche was trying to show the lineage of these Greek thinkers to modern science. The influence of Lange is notable here: since Lange does precisely this in his *History of Materialism*, setting up a history of science that begins with the early Greeks, and follows their influence up to his present day. There are ideas that Nietzsche attributes to the Greeks,

⁴¹ Whitlock, *PPP*, xxii-xxvi. Whitlock argues: The Pre-Platonic lecture series "was begun as early as 1869, was almost certainly completed in 1872, had extensive side notes written to it in 1873, had a companion piece written for it in 1874, and was offered as a lecture series for a last time at Basel in 1876"(xxvi).

⁴² It is evident as early as his essay "Schopenhauer as Educator" (1874), in which he expresses his empathy with Schopenhauer, who also was alienated from the academic establishment.

⁴³ Nonetheless, Nietzsche did maintain a small contingent of hearty supporters at the university: "a closed little circle" of "mostly youthful comrades" who regarded Nietzsche as "their great light of the future" and as a "pioneering genius and vanguard of a new philosophy destined to render all prior views, methods, and systems obsolete." (Richard Reuter's recollection from Summer, 1876, *Conversations with Nietzsche* p 77)

which he thinks were discovered by the Greeks, and later covered over after the Greeks,⁴⁴ which include Greek atomism and the non-independence of soul and body.

The first important Greek thinker for us here is Heraclitus, who Nietzsche, in particular, spoke of fondly, with an intimate, heartfelt trembling.⁴⁵ The first of his scientific excursions occurs during his long discussion of Heraclitus, in which he refers to a thought experiment of Karl Ernst von Baer, where he notes how the perception of time seems to be correlated to pulse rate and perhaps to life span in general. In other words, a species that lives a very short life span would experience the world as if it is drawn out to the length of our life experience: thus everything would creep by in detailed slow motion. Whereas, something with a very long life, much longer than ours, would perceive the world in high speed, with days quickly passing by and seasons quickly encroaching upon each other. The number of perceptions we can make per second might also determine our sense of time. The relevance of this digression is to comment on our perception of Heraclitean becoming: “Whatever remains, the unmoving, proves to be a complete illusion, the result of our human intellect”(PPP 61). If we perceived slower and time was sped up then the processes of growth and decay would be more obvious and we would be less likely to carry ideas of permanence and would recognize the omnipresence of Heraclitean becoming. Our perceptions are built upon our physiology; our thinking is built upon the limitations of our physiology. Nietzsche believes that the connection between thinking and physiology is latent within Heraclitus.

Nietzsche also notes, in this excursion, the finitude of the cosmos: the sun will either burn out or our planet’s orbit will decay crash into the suns (PPP 62).⁴⁶ Speculations of the heat death of the universe were particular prevalent in scientific speculation at the time. This same issue appears also in “On Truth and Lying,”(1873), in its opening lines, which dramatically tries to illustrate the arrogance of human cognition, versus the great, transient vastness (BT 141). It is meant to dramatically highlight human limitations once again, to even further emphasize the limitations of human physiology: our vast limitations become all the more obvious in comparison to the great vastness, an idea which Nietzsche believes is latent in Heraclitus.

Empedocles is the next philosopher significant to our discussion here. The comments show Nietzsche’s understanding of Empedocles as believing in animism and life’s omnipresence. Nietzsche first notes that “The genuine Empedoclean idea is *the oneness of all living things*,” further explaining that a part of living things presses them towards unification and a part presses them apart: attraction and repulsion (strife and

⁴⁴ From 1870s notebooks: many possibilities “have not yet been discovered, because the Greeks did not discover them. Other possibilities were discovered by the Greeks and then later *covered up* again.” (PT “The Struggle Between Science and Wisdom” 191)

⁴⁵ A student of Nietzsche’s, Ludwig von Scheffler, described his experiences with Nietzsche, including attendance at some of his pre-Platonic lectures: “he read slowly and let the deep thoughts in [the pre-Platonic philosophers’] statements penetrate all the more into my spirit. . . . But one of those lofty forms detached itself with clearer profile from that dissolving flow. Here the lecturer's voice also was overcome by a gentle trembling, expressing a most intimate interest in his subject-matter: Heraclitus!!” (*Conversations with Nietzsche*, p 73)

⁴⁶ Nietzsche quotes Helmholtz on this point, who argues that the force of the tide slowly diminishes the mechanical force of the earth’s rotation, which, ever so subtly, is spiraling us towards the sun. Nietzsche probably read this in Lange (vol III, pp 7-8).

love; desire and aversion) and “all things, including thought, were to be explained from them”(PPP 116).

Empedocles envisioned a primal sphere of harmony and peace, broken apart when strife (repulsion) began to stir and create motion; then things began to unite under attraction, which has enough of an advantage over repulsion that living things and unified matter emerged. When describing this, Nietzsche, probably has in mind Empedocles’ fragment describing body parts wandering around unattached, “arms wandered unattached,” “eyes strayed about alone” and “Limbs wandered alone.”⁴⁷ Nietzsche sees this strange vision as a proto-atomistic/materialistic idea, describing it as chance forms combining in a process of trial and error towards forms capable of life: “all possible random combinations of elements, of which some are purposive and capable of life”(PPP 118). By Nietzsche’s interpretation, Empedocles is describing a form of organic selection, with functionless forms being dismissed and functional forms surviving to form organic life. Nietzsche, as Moore notes, regarded Darwinian evolution as “an echo of the philosophy of becoming first expounded by Heraclitus, Empedocles, Lamarck and, tellingly, Hegel,”⁴⁸ and we can see the process of becoming being applied to the organic in Nietzsche’s description of Empedocles, and the resemblance to Darwinian selection. Empedocles, as well, solves the problem (to Nietzsche’s satisfaction) of how something random can be apparently purposive or teleological, namely by this trial and error selection, where both functionless and functional forms are created, but only functional forms are retained.⁴⁹

Nietzsche sees Empedocles recognizing that life evolves out of strife and conflicting forces of attraction and repulsion and thinking, too, is created out of these conflicting forces—an idea Nietzsche would pick up, writing as late as 1888 in his notebook, “In all becoming-conscious there is expressed a discomfiture of the organism; it has to try something new, nothing is sufficiently adapted for it, there is toil, tension, strain—all this *constitutes* becoming-conscious”(WP 440)⁵⁰. Empedocles transfers Heraclitus’ idea of strife very directly to the organic,⁵¹ and is able to explain the apparent purposiveness of the organic as belying underlying randomness.

We come next to Nietzsche’s discussion of Democritus, which is heavily influenced by Lange, since Lange gave Democritus great prominence as an early Greek

⁴⁷ I’m quoting from Freeman, *Ancilla to the Pre-Socratic Philosophers*

⁴⁸ Moore, *Nietzsche, Biology & Metaphor*, p 26; Nietzsche alludes to Darwin in his discussion of Empedocles (PPP 116), which makes explicit the connection Nietzsche is making between the fragment about body parts and Darwinian evolution. Lange also connected Empedocles and Darwin, which certainly influenced Nietzsche (Whitlock notes this at PPP pp 239-240), and Stack notes: “Lange (and Nietzsche after him) links the non-teleological implications of Darwinism with the anti-teleological views of the pre-Socratic philosopher Empedocles.”(Stack, *Lange & Nietzsche* 14)

⁴⁹ He refers to Empedocles’ solution to teleology many times in notes from this time period (Brobjer, *Nietzsche & Science*, p 27)

⁵⁰ *Will to Power*; references are by section number, referring to Kaufmann/Hollingdale edition.

⁵¹ Whitlock believes that Nietzsche is paralleling Empedocles to Bosovich (who will later become part of Nietzsche’s theory of Will to power) in his discussion of conflicting forces and the organic (footnotes 50 & 51, on pp 117 & 118 respectively)

scientist—as perhaps the truest scientist among the Greeks,⁵² which Nietzsche would later echo in calling Democritus the high point in natural philosophy over the course of the classical age.⁵³ Nietzsche really only seems to take much of an interest in Democritus after reading Lange,⁵⁴ and Nietzsche, in the lecture, refers us to read Lange’s *History of Materialism* for more discussion of Democritus (PP 126). Nietzsche views Democritus’ atomism as the first “rigorous, scientifically useful *hypothesis*” in which everything is created by blind, non-teleological mechanical force (PP 126). Nietzsche describes Democritus perceptions and thought as mechanical—“Thought is a motion”(PPP 128)—explaining the movement of spirit (life-force, soul) mechanically (PPP 128) and identifying spirit and mind as one and the same, which fuses together thinking, bodily function and living. Nietzsche writes, “Both [thinking and perceiving] are mechanical alterations of spirited matter. . . . If it is excessively heated or cooled by this movement, it will think improperly and will be unhealthy”(PPP 129). The soul is basically materialized in Democritus, with thought and feeling and perceiving brought into the body.

It’s a basic but illuminating observation that the body’s state of health can affect, even inhibit, thought. This idea will certainly become very important throughout the history of Nietzsche’s thought, becoming most explicit in *Ecce Homo*, where he discusses his own health and its connection to his thought numerous times.

Some of the other Pre-Platonics he discusses in the lectures are also potentially significant for his early thought on the unconscious, but it seems to me that these are the three major, critical steps. Heraclitus really stresses the limitations of human capacity, the limitations of human physiology and human thought. Empedocles adds to that an understanding of the strife and conflicting forces inherent in human physiology and inherent in thought itself; and undermines presumptions of purposiveness in physiological construction. Democritus follows them by completely grounding thought in physiology and matter and noting the accidental nature of material force and motion. Democritus extends Heraclitus’ notion of becoming, so that even thought is becoming. Thought is a becoming bubbling to the surface of our accidental, physiological limitations: “consciousness skims over the surface” Nietzsche wrote in a note from the early 1870s (PT “The Philosopher” 50). The critical ideas are the effect of physiology and the instabilities and inconstancies of physiology being translated to thought.

⁵² The 1st chapter of Lange is “The Early Atomists—Especially Demokritos,” where he says he will prove that modern atomic theory developed from Demokritos’ atomism (vol I p 18).

⁵³ “that *culture of the most impartial knowledge of the world* . . . which had in Sophocles its poet, in Pericles its statesmen, in Hippocrates its physician, in Democritus its natural philosopher”(D 168 [References to *Daybreak* are by section number])

⁵⁴ “Nietzsche’s first mention of Democritus occurs in letters and notes during the second half of 1867—that is, after his reading of Lange, though he would, of course, have known about him before then,” Brobjer, *Nietzsche & Science*, p 27

Language and Consciousness

The beginnings of the positivistic middle period are emerging in the pre-Platonic lectures. His optimistic orientation towards science expands, where it finds its fullest expression in *Human, All Too Human* (1968-70; including *Assorted Maxims and Opinions and Wanderer and his Shadow*), and seems to continue into his next book, *Daybreak* (1881). We should remember that Nietzsche was at this point transitioning from his professorship in Basel, to his long period of wandering: his resignation is accepted in 1869 and Nietzsche continues in a semi-vagabond life for the next ten years.

Most importantly, though, in *Daybreak* and *Gay Science* (1882) we see the focus on the centrality of language, structure and the metaphor-making to consciousness. This idea *begins* to appear earlier than this, especially in *Birth of Tragedy* (1872). The central distinction in *Birth of Tragedy* is between the Apolline and the Dionysiac drives. The Apolline represents structure, form-making, image, dreaming, representational art, individuality; the Dionysiac represents structurelessness, form-shattering, intoxication, music, community, becoming. The Apolline individuates and separates and delineates the cacophony of experience into discrete categories and structures, making appearance possible.⁵⁵ The elaborate structures that he describes shortly after *Birth of Tragedy* in “On Truth and Lying”—the human being as an “architectural genius who succeeds in erecting the infinitely complicated cathedral of concepts on moving foundations”—is an Apolline drive. The Apolline creates a surface, a veneer of structure on top of the unstable and always moving foundations of structureless becoming. The influence from Schopenhauer should be evident here: the orderly, rational intellect versus the disordered and insatiable will. The Schopenhauerean influence is strong, though he is in disagreement with Schopenhauer’s general denigration of the intrusion of the will. Nietzsche valorizes the will, and even attributes a wisdom to the Dionysiac instinct: for example, saying “in the case of all productive people instinct is precisely the creative-affirmative force and consciousness makes critical and warning gestures”(BT 13)⁵⁶; namely consciousness impedes the free creativity of the Dionysiac (“will” for Schopenhauer). And Nietzsche also remarks, in a note from 1872,

Unconscious thinking must take place apart from concepts: it must therefore occur in *perceptions*. . . . this is the way in which contemplative

⁵⁵ From a notebook from 1872: “All knowledge originates from separation, delimitation and restriction; there is no absolute knowledge of a whole”(PT “The Philosopher 109). The idea of structure making appearance possible is very much in a Kantian framework; Nietzsche would continue to believe throughout his career that the completely unstructured, always-changing nature of becoming made it incomprehensible, except as an opposite of being, and inexpressible, except as a metaphor-laden image or word. Cf. GS 261: “The way men usually are, it takes a name to make something visible for them.”

⁵⁶ This same argument is repeated identically, in slightly different words, in BGE 13 (*Beyond Good & Evil*, references are by section number, I quote from *Basic Writings*).

philosophers and artists infer. . . . This kind of picture thinking is from the start not strictly logical, but still it is more or less logical. The philosopher then tries to replace this picture thinking with conceptual thinking. Instincts likewise appear to be a variety of picture thinking”(PT “The Philosopher” 116).

In other words, we think and make semi-logical conclusions outside of consciousness, in this picture-thinking realm of instincts and then try to retranslate them back into a more conceptual (word-based) realm, a more strictly logical realm. Based on his reading of Lange and Helmholtz, Nietzsche started to understand that unconscious thinking occurs within perceptions, but (as he discusses in “On Truth and Lying”) conscious thinking occurs in concepts, which are metaphors.

Thus, when in *Daybreak*, nine years later, he tells us that “Language and the prejudice upon which language is based are a manifold hindrance to us when we want to explain inner processes and drives” continuing further down, “*We are none of us* that which we appear to be in accordance with the states for which alone we have consciousness and words”(D 115). What Nietzsche begins to articulate here is that there is a conscious process that we can articulate and explain, but a vast realm of drives that we cannot articulate, but which we can nonetheless feel: “All our so-called consciousness is a more or less fantastic commentary on an unknown, perhaps unknowable, but felt text”(D 129). We have within us a vast complex of drives impelling us in not necessarily consistent directions: “However far a man may go in self-knowledge, nothing however can be more incomplete than his image of the totality of *drives* which constitute his being”(D 119). This is the vast swaying and frothing underbelly upon which conscious builds its structures.

Gay Science continues Nietzsche’s ideas about language and expands them. Nietzsche again notes the simplicity of thought versus the complexity of feeling, by which he is referring to this complex of drives: “Thoughts are the shadows of our feelings—always darker, emptier, and simpler”(179) continuing this idea, “Even one’s thoughts one cannot reproduce entirely in words”(244). In other words, feelings are the most complex, and thoughts are a simpler versions of them, but words are even less complex, since they cannot even reproduce the thoughts, and cannot even approach reproducing our feelings. It is also the factor that language is metaphor-laden, which is another reason words cannot replicate thoughts—they have to express the thoughts in comparison to common sensations from our experience, and, at that, our common experience. As Nietzsche says in *Zarathustra*, if you have a virtue, you should call it “inexpressible and nameless,” since if you name it, “you have her in common with the people”(Z:1 “On Enjoying and Suffering the Passions”)⁵⁷ and thus your thought has lost its individuality.

Will, too, Nietzsche credits with great complexity that belies our simple model of “I will and then action follows,” saying: “Every thoughtless person supposes that will alone is effective; that willing is something simple, a brute datum, underivable, and intelligible by itself. . . . He knows nothing of the mechanism of what happened and of

⁵⁷ I quote from *Portable Nietzsche*. References are by Part number, and section title. Cf. also *GS* 261: “What is originality? To see something that has no name as yet and hence cannot be mentioned although it stares us all in the face.”

the hundredfold fine work that needs to be done to bring about the strike”(GS 127). So much falls in between “I will” and “action follows” that escapes our notice.

Two somewhat new ideas about consciousness are also relevant in *Gay Science*: first, that conscious developed through some sort of evolutionary process and second, that consciousness is a relatively late innovation. In sections 76, 110 and 111 Nietzsche argues that our prized faculties of logic and reason exist because of their usefulness for survival, rather than because of their accuracy. Nietzsche had made a similar argument as early as “On Truth and Lying” saying that our need for fixed truths emerged out of our need to form into societies and communities, which to exist require agreement and consistency among its members (BT 142-43). In these arguments utility consistently trumps accuracy. If we return to the implications of Helmholtz’s and Fechner’s theories, we see the same factors: our sensations *sufficiently* capture and reproduce the environment so that we can judge, evaluate, and act *well enough* to survive and thrive.

Language is tied to logic and structure already with the connection between language and the Apolline, between form-making and language and concepts that Nietzsche has established in “On Truth and Lying” and *Birth of Tragedy*. Language emerges out of this need to form into societies and communities, and, too, is dictated by the necessity of *utility*, the *sufficiency* for survival, and is guided towards the form-giving tendencies already rigidified in logic. Language, at best, inexactly replicates our thoughts and, at worst, distorts them, but it works for what we use it for.

Also in *Gay Science* is the argument that consciousness is a late innovation. Nietzsche argues, “Consciousness is the last and latest development and hence also what is most unfinished and unstrong”(GS 11). This starts to illuminate the preference for instinct that he professes in *Birth of Tragedy*. For Nietzsche, the instinct has been developed over a long period of time, has been refined through incomparable generations of evolution, and thus represents the deep knowledge of generations of experience. Consciousness on the other hand is a relatively recent innovation, that is not yet mature, and thus can represent a danger to the organism. Consciousness is a thin veneer of rationality atop the great becoming of the unconscious. Its decision-making faculties are not as equally refined. In section 1 he posits that perhaps even some of the human tendencies that we most denigrate and regard as evil, may nonetheless contribute to the sustenance of the species, else they would have been eliminated,⁵⁸ but consciousness

⁵⁸ The resemblance to Darwinian selection bears comment. Nietzsche professes antagonism to Darwinism (*Twilight of the Idols [TI]* “Skirmishes of an Untimely Man” 14, is titled anti-Darwin, as are two notebook entries from March-June 1888 [collected in *WP*: 684 & 685]; in *Ecce Homo [EH]* he complains of being called Darwinian [“Why I Write Such Good Books” 1]), but his antagonism in these notes is mostly because of his preference for “will to power” over “will to survive,” which he thinks leads to teleological assumptions (cf footnote 84). On the other hand, C. U. M. Smith in “Clever Beasts Who Invented Knowing,” argues that despite that Nietzsche had a defective understanding of Darwin, he fairly consistently agreed with him, even if he thought he didn’t. Robin Small, notes that Nietzsche’s genealogy of morals, “seems to me to have a strongly Darwinian character” (“What Nietzsche Did During the Science Wars,” *Nietzsche & Science*, 167). Moore says, “Nietzsche adopts a broadly evolutionist perspective” (*Nietzsche, Biology and Metaphor* 21). In the Prologue to *Zarathustra*, mentioning that man comes from a worm and is a rope tied between an ape and a superman (section 3) suggest a belief in evolution. And his note from 1872-73 in which he says he holds Darwinism to be true (despite its “terrible consequences” *PT* “The Philosopher” 122) suggests the same, though it is uncertain what he

hasn't had sufficient time to be eliminated.

understands when he says Darwinism here. Nietzsche read a number of anti-Darwin writers (cf. next section and footnote 65 below).

Darwinism and Wilhelm Roux

Nietzsche became aware of Darwinism not long after Darwin's publication of *Origin of the Species* through his reading of Lange's *History of Materialism* in 1866.⁵⁹ But, in the expanded edition of Lange's *History* (published eight years later in 1873), which Nietzsche first acquired in 1882, Lange considerably expanded his discussion of Darwin (cf. Lange vol. 3 pp 26-27). Nietzsche read through Lange's *History* extensively from 1883-88, especially underlining most heavily this expanded section, titled "Darwinism and Teleology" (Brobjer, *Nietzsche & Science*, 40). The issue of Darwinism seems to concern him much more in the 1880s, and he read a number of evolutionary thinkers including, most importantly, Wilhelm Roux (1850-1924).⁶⁰

Roux published his *The Struggle of Parts in the Organism (Der Kampf der Theile im Organismus)* in 1881, which Nietzsche first read the same year, just before reading Lange's expanded *History*. The book was a response to Darwinian theory, proposing an alternative mode of evolution. Nietzsche probably never read anything by Darwin about his theory of Natural Selection, nor by Darwin's major British supporter, T. H. Huxley, nor by Darwin's major German supporter, Ernst Haeckel (Brobjer, *Nietzsche & Science*, 22) and most of Nietzsche's knowledge of Darwin comes through Lange's *History* (Smith, p 69). But Nietzsche did read other texts pertaining to evolution and Darwinism quite extensively.⁶¹

A bit about the history of Darwinism from this time period: Darwin launched his evolutionary theory on the scene with the publication of the *Origin of Species* in 1859, which was quickly translated throughout Europe. Europe had been in a state of ambivalence towards evolutionary theory for decades. For example, Lamarck (1744-1829) was mostly ridiculed and ignored for his 1809 book, *Philosophie Zoologique*⁶², though, of course, evolutionary theories had been garnering controversy for quite some time before Lamarck. But Lamarck is mostly notable for becoming influential after the publication of Darwin's *Origin* as an alternative to Darwin. After the publication of Darwin's *Origin*, almost instantly evolutionary theory was accepted as scientific fact, both in the scientific and religious realms. Darwin's particular account of evolution, on the other hand, was particularly hard to buy. Some disliked the theory because it lacked

⁵⁹ Nietzsche refers to the idea that man descended from apes in a letter to Raimund Granier, from September 1865 (Anette Horn, p 261). It is not surprising that he was at least peripherally familiar with the theory before reading about it in Lange, since the theory had much of Europe abuzz almost at the moment Darwin's *Origin* was published.

⁶⁰ Moore writes, "As the copious entries in Nietzsche's notebooks attest, Roux's physiology had a profound effect on his thinking" (*Nietzsche, Biology, Metaphor*, p 37).

⁶¹ "The three disciplines in which he demonstrated the most interest were physics, physiology & Darwinism. . . . he read a large number of books on the subject [Darwinism], including specialist and biological treatises as well as works of popular science" (Brobjer, *Nietzsche & Science*, p 21).

⁶² Schopenhauer was influenced by and included discussion of contemporary evolutionary theory in *World as Will and Representation* (Smith, "Clever Beasts Who Invented Knowing," p 66).

purpose or direction or because it didn't justify man's supremacy or moral enlightenment.⁶³ Some wanted to avoid bringing us too close to animals, making sure human and animal were completely discrete.⁶⁴ Others thought that the mechanism of natural selection was too weak to explain the process.⁶⁵ Without genetic theory, there were explanations for why natural selection shouldn't work that were completely persuasive to contemporaries, such as the belief that a favorable variation would be watered down in successive generations—in other words, if an animal, for example, through accident gets better eyesight, it will be forced to breed with a partner of average eyesight, thus their kids will only have slightly better eyesight, and their kids after them will have eyesight even closer to the average; each favorable variation gets watered down because a species has to interbreed with other species without that variation. Gregor Mendel's revolutionary paper on pea plants, "Experiments on Plant Hybridization" was published in 1866, but it wasn't until after the turn of the next century that it was rediscovered (and with the rise of genetic theory in the early 20th century, evolution by natural selection was also rediscovered). Mendel's paper, for one, explained a mechanism for how favorable variations would not be watered down.

Since Darwin was the most famous evolutionary theorist, "Darwinism" became synonymous with evolutionary theory, and was widely used to describe evolutionary theories in opposition to Darwin's mechanism of natural selection, such as "Social Darwinism" for example. In German, it was Ernst Haeckel, a biology professor at the University of Jena, who became the most famous supporter of Darwin, publishing his *Natürliche Schöpfungsgeschichte* in 1868 (Weikart, p 475). Nietzsche's friend, Paul Rée, who he first met in 1873, was also and an avid supporter of Darwin and had read through Darwin's books. As well, in many ways, Germany had already been primed for the acceptance of evolution by a number of pre-Darwinian German thinkers; Kant and Hegel both proposed evolutionary theories, and a number of Germans had followed.⁶⁶

Roux was a disciple of and influenced by Ernst Haeckel (Müller-Lauter, p 167),

⁶³ cf Peter J. Bowler, *Evolution: The History of an Idea*; especially "Darwinism: Religious and Moral Problems" pp 218-245.

⁶⁴ These first two reasons, it should be clear, Nietzsche was not concerned with. He rejects Darwinism out of a misunderstanding that it promotes teleological principles (cf footnote 84 below), and he notes the prejudice of thinking we aren't animals in *Daybreak* 31.

⁶⁵ Moore: "Though most biologists accepted that natural selection could and did cause heritable change, many believed that it was not nearly as powerful as Darwin claimed, and that it played only a secondary role in evolution—or at the very least needed to be supplemented by other, more efficacious forces" (*Nietzsche Biology, Metaphor* 24). Brobjer lists Roux, Lange (who argues for a law of development in his *History*), W. H Rolph (cf. p 42 below), and Carl von Nägeli, (cf. p 34 below) as three German theorists who provided supplementary explanations to natural selection for Nietzsche. Nietzsche didn't reject natural selection but thought it either needed to be supplemented (such as the above theories) or explained by a more fundamental instinct (such as "will to power," cf footnote 84 below).

⁶⁶ cf. Schwarz, "Darwinism between Kant and Haeckel," pp 582-590: "The stage was so well prepared for Darwin's theories that as soon as his main concepts became known many of his German followers immediately surpassed him with regard to the consequences they reached for evolutionary thought"(p 590).

who, as I mentioned, Nietzsche probably didn't read.⁶⁷ Haeckel, a materialist, believed in a physiological/physical soul, with its basic unit being the cell. He published in 1866 his *Theory of Cell-Souls* (*Theorie der Zellseele*), which argued for the basic unit of the soul and of psychic life being the cell-soul; the mental life of an organism is a complex of these cell-souls, which even includes will-cells,⁶⁸ all of which are "below the conscious level but analogous to mind in higher organisms."⁶⁹

Roux follows upon this idea of the autonomy and volitional independence of the individual units of organic life and begins to imagine the possibility that the struggle for existence might also occur at the cellular level. He takes the Malthusian principle of scarce resources, Darwin's natural selection and Haeckel's cell-souls and fuses them together. Roux both shrinks and speeds up evolution: instead of a gradual generational evolution, there can also be intra-generational evolution within the body of the individual by internal struggle.

I want to bring up genetic theory again at this point, since it, most of all, paved the way for neo-Darwinism in the 20th century (though there were other changes in the scientific climate that opened the door for neo-Darwinism). Roux's theory doesn't make sense in the context of modern genetic theory, and thus lacks its original force. The process of cells mutating, growing rapidly and successfully competing for scarce resources does occur in the body, but not healthily, for example, cancerous growth. The cells, once mutated, are no longer designed to act for the overall sustenance of the body (which is not how Roux imagined it) and may actually out-compete cells that are working for the sustenance of the body. For Roux, it seemed conceivable that competition would always act for the benefit of the body since the weak parts of the body would be shed, and would no longer reduce the resources of the strong. The dominant theory of inheritance, accepted by both Lamarck, Darwin, Roux and Haeckel (in various similar forms) was pangenesis, which assumed that all parts of the body contribute to the reproductive gametes continuously throughout one's lifetime, so that acquired characteristics are retained.⁷⁰ Thus, in Roux's model, there is struggle between parts of the body, not just between different cells, but also between different parts of the body, between different organs—at multiple levels of organization, and these struggles contribute to stronger parts of the body, which through pangenetic inheritance are passed

⁶⁷ Though he is mentioned a number of times in Lange's *History*, in the expanded edition, but only concerning embryology and his defence of Darwin, not mentioning cell-souls.

⁶⁸ Cf. Moore, *Nietzsche, Biology, and Metaphor*, pp 39-41

⁶⁹ C. J. Warden, "The Development of Modern Comparative Psychology," p 491. Haeckel also believed that there was a unity of the organic and inorganic (via Darwinian theory) and that all organic matter had psychic properties, and he would later integrate these ideas into a grand pantheism of the unity of everything (cf. Niles R. Holt, "Ernst Haeckel's Monistic Religion").

⁷⁰ Darwin's theory used the term "gemmules," which are essentially mini-genes for every cell. The gemmules are shed and consolidate in the reproductive organs prior to fertilization. Thus, if (in keeping with Darwin's theory of instincts) a man habituates himself to run whenever he hears a suspicious sound, the cells in the brain overseeing that habit will change and will shed different gemmules, finding their way to the gonads, producing new sperm which will have genes for an instinct to run from suspicious sounds. The main experimental disproof was from August Weismann (1834-1914), who, in the 1880s, bred mice, cutting off their tails every generation and showing that even after twenty-two generations the tails still grew back the same length.

on to the next generation⁷¹

Roux must have appealed to Nietzsche, since evolution appealed to him but he, like many of his contemporaries, was unsatisfied with the Darwinian explanation, and Roux's theory built on Darwin's struggle-based ideas, without having to evoke external, teleological ideas, like the inevitability of development or a perfection principle. It probably helped that Roux, as well, invoked the ancient Greeks, Heraclitus and Empedocles, to show how his theories of conflict and struggle were recognized but forgotten (Müller-Lauter, p 168). The idea of struggle acting for the cumulative best interests of a society (and, by analogy, a body as well) appears in one the prefaces Nietzsche sent to Cosima Wagner in 1872, "Homer's Contest," which argues that the Greeks believed in two forms of Eris (discord), one which was malicious and vengeful, one which was beneficial and competitive; this latter Eris contributed to the Greek strength: made them better athletes, generals, politicians, improved their education, etc.

Nietzsche had also been thinking about these issues of inner struggle even before he came upon Roux. He had already made the analogy from the benefit of struggle to the community to the body as community. In his discussions of the unconscious in *Daybreak*, which was written just shortly before he started reading Roux,⁷² he notes,

there come into play motives in part unknown to us, in part known very ill. . . . *Probably* a struggle takes place between these as well, a battling to and fro, a rising and falling of the scales . . . something quite invisible to us of which we would be quite unconscious. . . . though I certainly learn what I finally *do*, I do not learn what motive has actually proved victorious" (D 129)

The first place where the influence of Roux is seen is in *Thus Spoke Zarathustra* (1883-85) and *Beyond Good and Evil* (1886). Nietzsche first reads Roux's book in 1881 and spends some time mulling over it in his notebooks from 1881 to 1883 (Müller-Lauter, pp 169-171) before it begins to appear in his published works. Nietzsche writes in *Zarathustra*, "The Body is a great reason, a plurality with one sense, a war and a peace, a herd and a shepherd," which is still similar to *Daybreak*, but becomes different as he continues, "There is more reason in your body than in your best wisdom" (Z:2 "Despisers of the Body"). Nietzsche has taken the nascent concept of instinct as Dionysiac creative force from *Birth of Tragedy*, begun to recognize it as integral with this internal struggle he recognized in *Daybreak*, and has used to articulate the notion of the wisdom and maturity of these instincts (more matured and thus wiser than consciousness, as I noted in *GS* 11) as due to being the product of such struggle. A recognition of the reason (the reason and virtue of the selective property of struggle that he noted in "Homer's Contest") of the internal struggle and the impetus to apply this struggle to the instincts, comes from his influence from Roux, who believed in the virtue of this internal struggle, at least as an adaptive principle.

Nietzsche continued to believe that struggle and opposition were strengthening,

⁷¹ Moore, *Nietzsche, Biology and Metaphor*, pp 37-38; Weickart, "Origins of Social Darwinism," p 477.

⁷² Müller-Lauter notes that these passages from *Daybreak* referring to inner struggle in *Daybreak*, "reveal above all the influence of A. Spir and F. A. Lange" (p 164).

even in his famous 1888 aphorism, “*Out of life’s school of war*: What does not destroy me makes me stronger.”⁷³ But even more interesting is his argument that as an immoralist he is not harming virtue; morality is like a king that is shot at, and if he survives is strengthened in his position. He concludes: “Moral: *morality must be shot at*”(TI “Maxims & Arrows” 36). This argument is found in the section titled “Maxims and Arrows,” implying that this set of short maxims is meant to serve the same purpose, to shoot at ideas, so that if they survive they will be strengthened. This is confirmed in passages from *Gay Science*, when he says, “For a doctrine to become a tree, it has to be believed for a good while; for it to be believed, it has to be considered irrefutable. The tree needs storms, worms, and nastiness to reveal the nature and the strength of the seedling. . . . not every doctrine can endure it”(106). I think this gives a good impression of Nietzsche’s general attitude in his polemical arguments, and his attempts to undermine old, sedimented ideologies, like the unity of the self: he may be trying to undercut and destroy these ideas, but he recognizes that if he does not destroy these ideas, they will only grow stronger.

Nietzsche also borrowed from Michael Foster (1836-1907), the Cambridge physiologist and protégé of T. H. Huxley, whose 1877 book *Text-book of Physiology* (translated to German in 1881) argued that the apparently individual will is composed of a myriad of individual wills (Moore, *Nietzsche, Biology Metaphor*, p 39). Nietzsche had already been doubting Schopenhauer’s oversimplified bipartite structure of will and intellect—as suggested by his 1876 letter to Cosima Wagner (above, p 5), and started to recognize the complexity of internal drives at least as early as *Daybreak*.

This idea Nietzsche openly expresses in section 19 of *Beyond Good and Evil* (1886), where he opens by criticizing Schopenhauer’s notion that the will is simple and immediately known to us. In *BGE* 19 Nietzsche imagines within us an entire community or social structure or political structure of “under-wills” or “under-souls,” somewhat akin to Plato’s tripartite soul, but not nearly so organized or so rigid—for Nietzsche it is a complex place of struggle and conflict and flux. Parts of us commands and parts of us obey, and how we identify the unified *self* or *I* is by identifying with the commanding part. We come to imagine free will, by identifying with both the commander and executor of the command, delighting in the successful execution of that command.

Relatively late in the development of these ideas, Nietzsche also garnered some influence from the botanist Karl Wilhelm von Nägeli (1817-1891)⁷⁴ and his book *Mechanisch-physiologische Theorie der Abstammungslehre*, published 1884. Nietzsche

⁷³ *Twilight of the Idols (TI)* “Maxims & Arrows” 8 (References are by section name and number).

⁷⁴ Nägeli is well-known for corresponding with Mendel from 1866-73. Mendel sought Nägeli since he was an expert on plant hybrids, especially hawkweed, which Mendel started to experiment with after his famous pea plant experiments. The results (different than his pea plant results) were baffling to Mendel, and confirmed Nägeli’s assumptions that hybrids were irregular and unstable, and that plants evolve constantly without uniform laws of inheritance. Nägeli also assumed that, even if Mendel’s previous results were to be trusted (Mendel had previously sent Nägeli his paper on pea plants, which Nägeli did read), they had no bearing on evolution. In short, Nägeli was not won over to Mendel’s genetic theories, and the correspondence was unsuccessful. (cf Weinstein, “Did Naegeli Fail to Understand Mendel’s Work?”)

acquired the book probably in 1886, reading through it closely,⁷⁵ and wrote a letter to Franz Overbeck about it, noting that it has “been sheepishly put aside by Darwinists”(qtd in Horn, p 261). Nägeli believed in a “perfection principle,” which led to greater complexity. He called the seat of heritability the *idioplasma*, and argued, with a military metaphor, that a more complex, complicatedly ordered idioplasma would usually defeat a simpler rival (Horn, p 265-266). In other words, he is also arguing for an intra-generational, internal evolution, similar to Roux, except emphasizing complexity as the main factor instead of strength. These ideas appealed to Nietzsche’s notions of the self—Nägeli’s perfection principle showed a tendency for greater complexity, bolstering Nietzsche’s attack against a simple, unified self, the “*soul-atomism*”(BGE 12) as he called it.

This is as good a time as any to remind ourselves that Nietzsche here must certainly be aware of the metaphor-laden, anthropocentric nature of his descriptions and of the scientists he is reading. In using such descriptions, he is certainly not abandoning the idea that our language burdens us with metaphors, or that our perception is mediated by a number of metaphorical steps. It’s just that he realizes that this is the best we can do. We do not get to the *soul-itself* through this description, though we can successfully take apart any naïve notions of the unified simplicity of the self and soul, pointing out that they are concepts only unified in language. This is an issue that will come up again with discussion of “will to power,” and for now I will move on to discussing communication and selection.

⁷⁵ Brobjer says it is the most heavily annotated book of his 1886 reading, (“Nietzsche’s Reading and Private Library,” p 679).

Communication and Adaptation

Nietzsche reprinted a number of his books in 1886, adding new prefaces to *Birth of Tragedy*, and *Daybreak*, consolidating the *Human, All too Human Works* into two volume work and adding a new preface. *The Gay Science* is among these reprinted works, and Nietzsche not only adds a new preface, but he adds a whole new fifth book. *The Gay Science*, with book five, appears in publication in 1887.

In section 354 of the fifth book is Nietzsche's most sustained discussion of consciousness in his published works. First of all, he states the origin of the idea of the unconscious, here acknowledging the insight that his studies of physiology have provided towards his understanding of the unconscious: "now physiology and the history of animals place us at the beginning of such comprehension. . . . For we could think, feel, will, and remember, and we could also 'act' in every sense of that word, and yet none of all this would have to 'enter our consciousness' (as one says metaphorically)." By the history of animals, he is probably referring to recent ideas in evolution. And, though I have referred to some evolutionists that were certainly influential in his thought on the unconscious (particularly Lange, Roux and Nägeli; and Rolph will be mentioned later), I am not quite clear what he means by this statement.⁷⁶ His understanding that physiology is integral to making us aware of the unconscious, should be evident at this point, with emerging theories of perception from Helmholtz, Fechner and Gerber, and Foster's beliefs on physiology, and theories of evolution that Nietzsche was interested in, from Lange, Roux and Nägeli.

Nonetheless, after that brief mention of the origin of the idea of the unconscious at the beginning of section 354, Nietzsche continues to talk about communication and

⁷⁶ Perhaps he just means that animals develop under selective pressure and not by design; thus a mind of greater self-consciousness might make more sense if it were designed by God, but a complex mind of gaps and holes and subconscious activity is to be as expected as vestigial organs, like a tail bone (this theory makes the most, in context of what he says here in section 354, as well as elsewhere in *Gay Science*). Perhaps it is to say that since we are descended from simpler animals, which do not have consciousness, this shows that consciousness is a late development in the organic and thus means it cannot be the entirety of action or thought. Since we are descended from animals that think entirely unconscious, we might expect to retain unconscious thinking as a vestige from previous evolution. Perhaps it is also relevant that Karl Ernst von Baer (who's thought experiment on the experience of time Nietzsche used in the Pre-Platonic lectures) was the first person to notice, in 1828, that embryonic development in complex organism includes stages that are remarkably similar to embryos stages of simpler organism (Darwin would use von Baer's research as an argument in the 3rd edition forward of *Origin of Species* [1861] and *Descent of Man* [1871]). Haeckel used this idea to formulate his biogenetic law in 1866 (in the wake of Darwin) that an organism passes through its whole evolutionary development through its embryonic development (Schwarz, p 590). Thus, one might also infer that consciousness emerges at some stage of embryonic development, and doesn't exist prior to that point in a human. Haeckel's biogenetic law appears in the expanded edition of Lange's *History* (vol III, p 59), which Nietzsche first read in 1882.

consciousness. He here explicitly ties language and consciousness together saying that “*consciousness has developed only under the pressure of the need for communication*” and “Consciousness is really only a net of communication between human beings.” In “On Truth and Lying” Nietzsche made explicit the connection between language and physiology, and the idea that we at least conceptualize in this metaphor-laden language is explicit; the connection between language and consciousness is already implicit even then, which I have already discussed.

Consciousness is a social need, which develops insofar as one needs to communicate. Consciousness is the process of talking to oneself as if one is talking to another. It is the voice in one’s head that articulates one’s thoughts. I speculate that he wouldn’t want to completely reduce consciousness to this subvocalized speaking and this internal verbalization. At the edge of our conscious are drives, feelings, motives, thoughts, some of which we do notice which we can’t quite express in this interpersonal, metaphor-laden exchange of language, as he speaks of in *Daybreak*, that I quoted above, there is an “unknown, perhaps unknowable, but felt text”, and “motives in part unknown to us, in part known very ill”(D 129). Motives, drives, wants, dreams, ambitions, inclinations, tendencies, instincts, pleasures, impulses, penchants, appetites, affinities, desires—all of which one is only partly aware. As he puts it in *Daybreak* “Anger, hatred, love, pity, desire, knowledge, joy, pain—all are names for *extreme* states; the milder, middle degrees, not to speak of the lower degrees which are continually in play, elude us”(115).

In other words, we are only aware of the states that stand out, the states that stand out sufficiently that we give them a name, and only those (since language is interpersonal) that we can corroborate with others. In other words, that which is individual, singular eludes us: “all our actions are altogether incomparably personal, unique, and infinitely individual; there is no doubt of that. But as soon as we translate them into consciousness *they no longer seem* to be.”(GS 354). Even to give an internal state a name is to emphasize what it has in common with other internal states, at the expense of noting what is completely original and unique about it. As well, language has limitations and can only designate a finite number of states, and thus to imagine a catalog of every particularity of our inner flux would be impossibly unwieldy. But even then, if we could name finer particularities of our inner states, might there be even milder and subtler differences that still elude us? Is there some baseline of discreet divisions between internal states that can be neatly categorized and organized? Or is our great internal complexity like a great *becoming* of continual flux, of constantly individual and ultimately ineffable states. Consciousness, and our capacity to articulate our inner states are limited in their capacity to grasp the greater complexity of the unconscious.

Continuing with section 354, Nietzsche not only speaks about the connection between language and consciousness, he also talks about the forces that impelled language to develop in that direction, the selective pressures in our deep history of development. Nietzsche spoke of selection earlier in *GS* (sections 1, 76, 110, 111), and used the argument that certain skills, like our logic and reason, are only existent because they provided survival value to our species. He argues that consciousness may not have survival value and that consciousness is a late development and might represent a danger to our species (*GS* 11). It seems that he is thinking both that consciousness really hasn’t been given sufficient time to be tested (namely sufficient time to be weeded out if it is in

fact harmful) and also that it will ripen, on the model of Roux and Nägeli. Our instincts have had time to be tested and refined, explaining the “wisdom of the instincts.” Given time the internal struggle and perfection principle will strengthen our conscious; but, until that happens, we may be vulnerable.

Also, important for this idea of consciousness as a development, is this idea that organs develop and their usefulness follows (organs develop non-teleologically). I have already mentioned that Nietzsche found in Empedocles argument for showing how order can arise without purpose—that we needn’t resort to teleological explanations to explain the origin of the apparent purposiveness and design of physical structure. Nietzsche had been consistently antagonistic to teleology throughout the history of his thought, from the earliest days,⁷⁷ and continued his concern into the 1880s.⁷⁸ From an 1873 fragment, remarking on Hegel’s theory of history, Nietzsche notes that since we prefer to tell stories to each other which contains aims and goals (purpose, end, direction), we thus perceive the events that happen to us as containing an aim; we make histories and events into stories (*Portable Nietzsche*, pp 39-40). Thus, we interpret events artistically, as stories, in the same way as our metaphor-making is an artistic process. We interpret our capacities and inclinations and physical structures as the conclusion of a long story, in which they were the goal all along.

The physiological organs of consciousness, for one, are not designed for consciousness. Physiological organs precede their purpose. One traditional example in contemporary biology would be the development of the human lung: now used to transfer oxygen to the blood, it once was used to control the elevation of a fish underwater (swim bladder). If our physiological organs of consciousness had been designed for consciousness, then it would be logical that we could be aware of *all* our motives, drives, wants, dreams, ambitions, inclinations, tendencies, instincts, pleasures, impulses, penchants, appetites, affinities, desires, etc.,.

Our consciousness emerged out of a need to communicate. Or, better put, the inclination to form into communities and societies proving advantageous and the capacity to communicate proving valuable for that purpose, consciousness as communication was selected for. Consciousness is sufficient insofar as it is useful and serves its purpose in helping us adapt to the interpersonal world of human society, but it is insufficient insofar as it used towards self-understanding or any sort of complete self-perception.

⁷⁷ An early fragment, from 1868, of a planned but uncompleted essay called “Teleology since Kant” (Kant’s *Critique of Judgment*, which deals with teleology, was probably the only work of Kant that Nietzsche was directly familiar with, mentioned above, footnote 12) declares war on teleology (Swift, “Nietzsche on Teleology” pp 29-31). And Moore writes: “One of the most consistent themes in Nietzsche’s writings on Biology—and which is supported by almost all of the biologists whose works he read—is his frequently repeated assertion that an organ’s present function cannot account for its development; he believes instead that form is anterior to function”(Nietzsche, *Biology, Metaphor* p 44). Nietzsche also criticized Darwinism since he believed it had traces of teleology (cf. footnote 84).

⁷⁸ Nietzsche read an expanded edition of Lange’s *History of Materialism* repeatedly from 1883-88 (first acquired 1882), underlining most the section “Darwinism and Teleology”(Brobjer, *Nietzsche & Science* p 40). This section had been expanded from the edition Nietzsche read in 1865, and it concerns how Darwinian theory undermined teleology; though Nietzsche didn’t believe that Darwinism *completely* undermined teleology (cf footnote 84 below).

Will to Power

For this final section I will be discussing Nietzsche's beliefs on the doctrine of the *will to power*, as both a drive of life and a fundamental psychological drive that emerged in his thought in the 1880s. We will begin with a discussion of influences and the idea's appearance in his published works. Then we will move to a discussion some of his unpublished material.

The phrase "will to power" (*Wille zur Macht*) first appears in *Zarathustra*, part 1 (1883, "1001 Goals"), then in part 2, in two sections (later in 1883, "Self-Overcoming" and "Redemption"). "Self-Overcoming" describes it in most detail, saying it is an "unexhausted procreative will of life." There is will to power where there is life and even the strongest living things will risk their lives for more power, suggesting that will to power is stronger than the drive to survive.

Suggestions of the will to power, though, do appear earlier in published works: the "lust for power" or "desire for power" (*Machtgelust*) appears in *The Wanderer and his Shadow* (1880) and *Daybreak* (1881). The *Machtgelust* begins with the pleasure of the feeling of power and the hunger to overpower.⁷⁹ Nietzsche begins to expand on this proto *will to power* in *Gay Science* (1882), where in a section titled "On the doctrine of the feeling of power," he—as he had in *Wanderer* and *Daybreak*—connects the desire for cruelty with the pleasure in the feeling of power (13).

Elsewhere in *Gay Science*, he notes that it is only "in intellectual beings that pleasure, displeasure, and will are to be found," excluding the vast majority of organisms (110). Since he had noted that perhaps even the most harmful persons contribute to the survival of the human race, and have been selected for because of their survival advantage (if it were not useful, it would have been eliminated, *GS* 1), this seems to establish a connection between the desire for power and adaptive selection. In other words, just as our particular logic and reason and general mode of thinking were retained for their survival value, and other drives were selected because they proved advantageous, so too the drive to increase one's power was also selected for—those beings that sought to conquer and destroy their more peaceable neighbors were more likely to not be destroyed by more aggressive rivals. That the desire for power is reserved only for intellectual beings, implies that it, like consciousness, may perhaps be a relatively late innovation.⁸⁰

There is notable influence here from Léon Dumont (1837-77), whose 1875 book *Théorie Scientifique de La Sensibilité le Plaisir et la Pein* Nietzsche read in 1883 (Small, *Nietzsche in Context* p 166). Dumont believed that pain and pleasure occur within the organism, but outside the realm that constitutes the self: namely that when one is anesthetized the sense-reception occurs at the nerve ends but it doesn't register in the mind (*ibid.*). Even more importantly, Dumont believed that pleasure is related to increase

⁷⁹ cf. eg. *WS* 284 and *D* 65, 112, 189

⁸⁰ Also, it might suggest that the reason beings with a strong desire for power developed to a much greater level of complexity (intellectual beings) is *because* of a greater desire for power.

in force (ibid, p 167). This idea is already suggested by Nietzsche in *Wanderer* and *Daybreak*, in his explanation of certain pleasures, such as cruelty, deriving from the exercise of power. Dumont, though, provides a physiological basis for Nietzsche's speculation. Dumont's theory also would have seemed to confirm Nietzsche's theory that pleasure and pain are reserved for intellectual beings, since, according to Dumont, pain and pleasure require a coming to consciousness and not just a sensing.

In 1883, though, Nietzsche coins the phrase "*Wille zur Macht*" in *Zarathustra* and no longer limits it to only those intellectual beings that can actually experience the *feeling* of power; it applies to all life. The ideas "desire for power" or "lust for power" are no longer sufficient, since Nietzsche wants to speak of all life, including beings that are not sophisticated enough to actually take pleasure in power. Though in *Gay Science* he had said non-intellectual beings couldn't even will, his application of will becomes more expanded, constructed on the anthropocentric *metaphor* of what we conceptualize as will.⁸¹

Nietzsche further expands the idea of will to power in *Beyond Good & Evil*, but I want to first discuss the influence of the zoologist William Rolph. Nietzsche read Rolph's *Biologische Probleme* probably in mid 1884 and it clearly interested Nietzsche (Moore, *Nietzsche, Biology, Metaphor*, p 47); his copy is heavily annotated (Brobjer, "Nietzsche's Reading," p 679) and he made many notes concerning Rolph. Like Roux and Nägeli, Rolph wished to argue for evolution by different mechanism than the struggle for existence, arguing that all life seeks primarily to expand itself. Organisms fulfill this need through assimilation, trying to make as much of what is found around them into part of themselves, for example by seeking to increase intake and nutriment. Life forms are naturally insatiable in this way.

After Nietzsche reads Rolph in 1884, in his next published work, *Beyond Good and Evil* (1886), the influence of Rolph seems to appear, as he incorporates Rolph's thoughts into his burgeoning idea of the "will to power." Nietzsche writes, "Even the body within which individuals treat each other as equals . . . will have to be an incarnate will to power, it will strive to grow, spread, seize, become predominant—not from any morality or immorality but because it is *living* and because life simply *is* will to power." The body spreads and seizes and incorporates and assimilates because it is living, and to be alive is to incarnate the will to power. *Beyond Good and Evil* has the most references to "will to power" in his published works, appearing in eleven aphorisms⁸² and this was

⁸¹ "Will to . . ." is widely used in Nietzsche's writings. Williams writes: "Interspersed among these spotty references of will to power are a spate of 'will to's. During the last six years of his philosophical writing, Nietzsche attached 'will to' to over one hundred and fifty different nouns"(p 449)

⁸² *Wille zur Macht* appears in BGE 22, 23 36, 44 ("Macht-Willen," translated "power-will") 51, 186, 198, 211, 227, 257 ("Willenskräfte und Macht-Begierden" translated "strength of will and lust for power") & 259. As I mentioned, the phrase appears in Z thrice and in GM five times: II:12, II:18, III:14, III:18 and III:27 (this last reference is not to the concept but to the book *Will to Power* that he planned on writing, but probably abandoned before he collapsed in 1889. Cf. footnote 86). "*Will to Power*" appears in his completed but posthumously published books: *Twilight of the Idols* "Skirmishes" 11, 20, 38, & "Ancients" 3; A (references are by section number) 2, 6, 9 (9="the will to the end, the *nihilistic* will, wants power."), 16, 17, 24 (whether 24 is about "will to power" is debatable) & *EH*, "Birth of Tragedy" 4.

the time of greatest development of the idea. This idea of Rolph and its connection to “will to power,” continues in book 5 of *Gay Science* (1887) where he describes will to power as the instinct for “*expansion of power*,” fundamental to all life (349).

Dumont’s pleasure in the expansion of power, Roux’s internal struggle, Nägeli’s drive towards complexity, and Rolph’s principle of insatiability and assimilation are fused together into Nietzsche’s theory of will to power.⁸³ Having derived the “will to power” from three anti-Darwin evolutionists (and Dumont) it seems appropriate that he should use his “will to power” as an anti-Darwinian explanation of evolution. He expresses a number of times (*BGE* 13, *GS* 349 & *GM* II:12) the idea that adaptation and the struggle to survive is a secondary drive in the evolution of animals, behind the desire to expand one’s power—the will to power.

Will to power is conceived as a universal drive or instinct, fundamental to *all* life. Nietzsche notes the shortsightedness of trying to promote democratic principles or principles of moral sentiment when, underneath, the essence of all life is will to power; thus it is a psychological drive that trumps all of these high-praised virtues (all of which can be re-understood as expressions of the will to power) and is even more fundamental than the Darwinian motivation to merely stay alive, which Nietzsche perceived as suggestive of a lingering teleology.⁸⁴

On the other hand, *some* later passage of Nietzsche’s seems to suggest that will to power is not an inevitable condition of *all* life, but merely a condition of *healthy* life; while other later passages suggest he was making an attempt to universalize will to power even beyond the biological, as a property of all matter, and thus as a universal physical principle. This appears to me to represent a divergence in Nietzsche’s thought on “will to power, which I will discuss.

The last years before Nietzsche’s collapse, after *Beyond Good and Evil*, are extremely productive, perhaps as a product of his sense of the imminence of his own demise: new prefaces to his old books (1886), book 5 of *Gay Science* (1887) and, *Genealogy of Morals* (1887). At the end of *Genealogy* he announces a “work in progress” which he is going to call *Will to Power: Attempt at a Revaluation of all Values*, which he starts writing, and makes numerous notes planning towards,⁸⁵ but ultimately abandons.⁸⁶ *The Case of Wagner* is published and from the drafts of *Will to Power*, he

⁸³ Moore: “The will to power is essentially . . . an amalgam of a number of competing non-Darwinian theories,” namely, Nägeli, Roux & Rolph (*Nietzsche, Biology, Metaphor* p 55).

⁸⁴ For example, at *BGE* 13 he argues that “the instinct for self-preservation is not the cardinal instinct,” but is instead will to power: “A living thing seeks above all to *discharge* its strength”(see also *TI* “Skirmishes” 14 & *GM* II:13). Anderson argues that Nietzsche here is objecting that the instinct for self-preservation is an extraneous motive that smacks of purposiveness and teleology, and we can simplify and eliminate teleology here with the idea of will to power (p 738). Will to survive seems as if living things have a goal to survive, whereas they are simply motivated by a more general drive, to expand power, which usually leads to a one also trying to survive, but sometimes leads to one dying for the sake of will to power.

⁸⁵ The phrase will to power appears in “147 entries of the Colli and Montinari edition of the *Nachlass*. . . one-fifth of the occurrences of *Wille zur Macht* have to do with outlines of various lengths of the projected but ultimately abandoned book”(Williams p 450).

⁸⁶ This didn’t prevent his sister Elisabeth from compiling some of his later notebook entries into a book titled *Will to Power*, under the presumption that Nietzsche’s plans to write it were cut short by his illness and not abandoned. Elisabeth originally published the book along with her

creates *Twilight of the Idols* (which was ready for publication at his collapse) and *Antichrist*, *Ecce Homo* and *Nietzsche Contra Wagner* were also completed but not ready for publication. After his collapse in Turin on January 3, 1889, aside from a few semi-coherent letters,⁸⁷ he writes nothing more. The rest of his life is characterized by moments of coherence punctuated by long periods of reticence,⁸⁸ with the reticence only increasing as he worsened. In the passages from his last published works dealing with “will to power” there appear to be no change, but even beginning with his first posthumous book, *Twilight*, there appears to be a difference. In “What I Owe to the Ancients,” section 3, he speaks of the Greeks as if their will to power is something unique. He speaks about liberal institutions undermining will to power (TI “Skirmishes” 38) and then continues in *The Antichrist* to speak of people who have apparently lost touch with their will to power: “Wherever the will to power declines in any form, there is invariably also a physiological retrogression, decadence”(A 17). Nietzsche also writes in section 2 returning to the idea of the “feeling of power”:

What is good? Everything that heightens the feeling of power in man,
the will to power, power itself.

biography of Nietzsche (1901), and expanded it in later editions. Elisabeth held back *Ecce Homo* (Nietzsche’s most autobiographical work, which was completed, if not completely ready for publication at the time of his collapse) in order to bolster her authority by giving her exclusive access to his own words about his writings, and she doctored letters between her and Nietzsche in order to give the impression that Nietzsche considered her an authority on his thought (cf. *Selected Letters* pp 226-229). But, later in Nietzsche’s productive career he more and more considered her to be malicious, interfering and controlling (especially as she interfered with his relationship with Lou Salomé), only exacerbated by her marriage to the anti-Semitic Bernhard Förster in 1885 (Nietzsche reacted negatively to anti-Semitism throughout his written work, both in response to Förster and Wagner—most uninhibitedly expressed in his “Madness Letters” [cf. footnote 87]). Furthermore, Kaufmann says that after Förster’s suicide (June 3, 1889; Elisabeth returned to Germany from Paraguay four years later in 1893), “she took private lessons in Nietzsche’s philosophy from Rudolf Steiner” and soon “Steiner gave her up as simply incapable of understanding Nietzsche”(Basic Writings p 660). She compiled *Will to Power* to promote the idea of it as a systematic *magnum opus* (cf. *WP* p xiii), and it was also edited to give an inflated impression of the importance of the concept of “will to power”: by cutting up the few references to “will to power” in Nietzsche’s late notebooks and spreading them throughout the book, it made it seem like a more persistent theme than it was (cf. Williams, p 456).

⁸⁷ Nietzsche wrote about 15, mostly very short notes, sometimes called his “Madness Letters,” between January 1 and January 6. Even the ones written in the days before his collapse (January 3) show well the degradation of his condition. Many of the letters repeat a (semi-whimsical) hostility to anti-Semitism (such as his letter to Overbeck, January 6: “I am just having all anti-Semites shot.”[*Portable Nietzsche* p 687]), most of them signed “Dionysus” or “The Crucified.” The closing lines of *Ecce Homo* are “Have I been understood?—*Dionysus versus the Crucified.*” Nietzsche also writes a note on these two types of religious men in March-June 1888 (*WP* 1052).

⁸⁸ S. Simchowitz’s saw him at the Jena sanitarium in 1889: Nietzsche’s speaking “made us all listen attentively, for we had never heard a man speak this way. . . . this Basel professor emeritus was quite something else! . . . His way of speaking had nothing of the lecturing professor about it. It was ‘conversation,’ and by the soft tone of the pleasant voice one recognized the man of best education. Unfortunately he did not finish his discussion. His thread broke off in the middle of the sentence and he sank into silence”(Conversations with Nietzsche p 224)

What is bad? Everything that is born of weakness.
What is happiness? The feeling that power is *growing*, that resistance is overcome.

What seems to me most different in the three above passages is this idea that there can be quantitative differences in will to power. It seems as if Nietzsche has revised his idea that will to power is a necessary property of all life, and has begun to say that it is characteristic of “life” in the figurative sense. In other words, those people who are growing, expanding, flexing their strength are *truly alive* and partake most fully of will to power; whereas those who deny will to power, who are weakness and meekness, partake most fully of decadence and decay.

It seems that this particular divergent line of thought on will to power is only supported by a few passages, which are themselves more suggestive than directly expressed.

The other divergent line of thought of will to power in this late period is more firmly rooted. We can begin with a passage from *Beyond Good and Evil*, where Nietzsche writes, “Suppose, finally, we succeeded in explaining our entire instinctive life as the development and ramification of *one* basic form of the will—namely, of the will to power . . . suppose all organic functions could be traced back to this will to power . . . then one would have gained the right to determine *all* efficient force univocally as—*will to power*”(36). We can even see Nietzsche here proposing how we could move from progressive universalizing of organic will to power to greater and greater explanatory breadth, until it can explain all physical force. First of all, as I indicated with Nietzsche’s transition from the “feeling of power” to “will to power” (above p 43) and in my description of Nägeli’s influence (above, pp 35-36), I have repeated that Nietzsche’s explanatory models have grown more anthropocentric and metaphorical; I am assuming that Nietzsche realized that there was no way to get around this misleading surface,⁸⁹ and embraced the metaphors. He begins that aphorism: “Suppose nothing else were ‘given’ as real except our world of desires and passions, and we could not get down, or up, to any other ‘reality’ besides the reality of our drives.” Whereas he criticized scientific anthropocentrism and said that its metaphor-laden descriptions only return to understanding of man “via the longest and most roundabout ways”(PT “The Philosopher” Appendix, 2) now he seems to recognize that this is the only way to understand the universe. The universe can be explained in terms of our most fundamental drive. We should also notice that he continually repeats the word, “suppose” as he proposes this idea.

Nietzsche makes his only reference in his published works to Roger Joseph Boscovich (1711-1787) in *Beyond Good and Evil* where he declares war on “soul-atomism”(BGE 12). Boscovich had rejected the idea of “materialistic atomism” which Nietzsche calls “one of the best refuted theories there are.”⁹⁰ Nietzsche had discovered

⁸⁹ Cf. *TI* “How the ‘true world’ finally became a fable,” where Nietzsche explains how the idea of a “true” vs. “apparent world” emerged, and how we now can abolish the “true world” as an unknowable beyond leaving us with only the “apparent world,” which is no longer the “apparent world” because it lacks the antithesis “true world,” ending this misleading dichotomy.

⁹⁰ This probably seems strange considering J. J. Thomson’s “plum pudding model” wasn’t even proposed until 1897; the gold foil experiment which first showed experimentally how much

Boscovich through Lange in 1866, but subsequently went directly to Boscovich's *Theoria Philosophia Naturalis*, and studied him directly.⁹¹ Boscovich, a supporter of Democritean atomism living not long after Newton, proposed that matter was composed of point-sized centers of force. Nietzsche started thinking very carefully through Boscovich into the 1880s to his collapse.⁹² The idea of matter as centers of force—that there is no matter, *only* force—complements Nietzsche's thought of generalizing will to power into a summary physical theory. As well, just as will to power could slough off the apparent teleology of the instinct for survival, so Boscovich's force-point could slough off the lingering metaphysical theory of *matter*,⁹³ a relic of the metaphysics of substance.⁹⁴

These ideas of an all inclusive physics or metaphysics built upon the will to power does not appear to arise anywhere else in his published works or in any of the final books published posthumously, but it recurs in his notebooks. Throughout the 80s, in his notebooks, Nietzsche is struggling with an equally elusive theory of the “eternal recurrence of the same” and much speculation on the physical possibility of this idea and the mechanics of its actualization recur in his later notebooks, which becomes tied with his theory of will to power as a potential physics integrated with the “eternal recurrence of the same.” Nietzsche appears to imagine a physical universe of perpetual struggle and force, which successively completes its cycle and returns to the beginning to it all over again.⁹⁵

empty space was in an atom was in 1909; and the nucleus was proposed by Rutherford in 1911. Maxwell even stated as late 1873 (in “Molecules”) that atoms were uncuttable (the etymological root of “atom”). But, in Germany, things were different: Boscovich's theory “is echoed in Kant's *Metaphysical Foundations of Natural Science*, which reduces matter to force altogether. Kant's view, in turn, became very influential in German physics through the work of Helmholtz and his followers. By the time Nietzsche wrote, treating matter in terms of fields of force was the dominant understanding of the fundamental notions of physics”(Anderson p 738).

⁹¹ After reading Lange's *History* in 1866, Nietzsche, as early as 1872, went on to study Boscovich's book for himself (Whitlock, “Boscovich, Spinoza and Nietzsche” p 202).

⁹² “Nietzsche was thinking of Boscovich's theory in its intricacies in 1882. . . . notes of a scientific nature directly related to Boscovich appear in the Nachlaß well into the year 1888.”(ibid, p 205).

⁹³ He may have also preferred these theories because they were simpler and more elegant, containing greater explanatory power with fewer principles (cf Small, *Nietzsche in Context*, ch 5: “Mechanism and Beyond,” pp81-98)

⁹⁴ Nietzsche comments in many notes about matter being a hypothesis drawn from the metaphysics of substance (Whitlock, “Boscovich, Spinoza and Nietzsche,” 207)

⁹⁵ For discussion, see Whitlock, “Roger Boscovich, Benedict de Spinoza and Friedrich Nietzsche”; Moles, “Nietzsche's Eternal Recurrence as Riemannian Cosmology”; Christa Davis Acampora, “Between Mechanism and Teleology: Will to Power and Nietzsche's Gay ‘Science’” *Nietzsche & Science*, pp 171-188; Stack, “Nietzsche and Boscovich's Natural Philosophy”; and Small “The Physics of Eternal Recurrence” *Nietzsche in Context* pp 135-152.

Conclusion

Because much of this work occurs only in Nietzsche's notebooks, we should regard it with a different eye. We can safely assume that the ideas appearing in Nietzsche's published works are given his imprimatur and official sanction, at least at the time of their publication. It can be useful to look into his notebooks for ideas that would later appear in published works so we can see their genesis. But we cannot know what Nietzsche's attitude towards works that didn't appear in publication: whether he rejected them or accepted them but didn't get a chance to publish them. It is safe to say that his notebooks are a workshop⁹⁶ where he experimented with new ideas, and came up with many ideas he decided against accepting. Nonetheless, the notebooks are filled with ideas, and we shouldn't be so overawed by Nietzsche's imprimatur to ignore them; they are ideas born out of the same creativity that birthed his most celebrated ideas. As long as we openly admit that these ideas don't have official sanction and thus may not *officially belong* to Nietzsche, then we can accept them as a wealth of creative speculation that are nonetheless Nietzsche's. If they are interesting, they are worth studying. It is disconcerting how these ideas were later used and abused and how Nietzsche's name was used an authoritative sanction of ideas and practices that he wouldn't have sanctioned, but what can be done to prevent the abuse of ideas but to understand them more fully?

That aside, what is most interesting to me here is this idea of a very organic drive, a drive that occurs primarily outside of the realm of consciousness, being universalized as his grand metaphysics. I have alluded a few times to the idea that the unconscious is the *becoming* beneath the veneer of the *being* of the conscious. I think Nietzsche saw in his will to power, especially through Boscovich and other physicists he was influenced by⁹⁷ a means of thinking the unthinkable *becoming* of existence, or at least one perspective through which to look at this becoming. The unconscious, via the will to power, as a parallel to becoming, is universalized to become a universal property of organic and non-organic matter; or, another way to put it, the unconscious is in direct connection with—its part of—the vast becoming of the universe, which passes endlessly through our mind outside of the limiting and limited narrowness of the unconscious via the physical/physiological basis of our thinking. It smacks a little of Eduard von Hartmann's (1842-1906) metaphysical theory of the unconscious as a grand universal unconscious in which we are all connected, like one great mind. Hartmann was greatly reputed in his day and Nietzsche read him early,⁹⁸ but later came to spurn and reject him. Hartmann's unconscious is a grand willing force that occurs within us, outside of our conscious and actualizes its ends through the conscious acts of will that we perceive to have originated

⁹⁶ Kaufmann referred to the notebooks as "the workshop of a great thinker," (WP, Preface, p xvi)

⁹⁷ eg. Johannes Gustav Vogt, Mayer, von Baer, Zöllner

⁹⁸ He read Hartmann's *Philosophie des Unbewussten: Versuch einer Weltanschauung* (1867) and other works by Hartmann from 1869-75; Nietzsche even praised Hartmann in an 1869 letter to Rohde (Brobjer, *Nietzsche & Science* p 30)

from our selves.⁹⁹ Hartmann is building on some of Schopenhauer's ideas, such as the metaphysical status of the will and the distinction between will and intellect; thus we can see the resemblances of Nietzsche's "will to power" to Schopenhauer as well.

This, grand physical theory, of course, *can* be reconciled with the other divergent strain of Nietzsche's later thought on the will to power. If we imagine that he is thinking that these people with greater will to power are merely tapping into this grand, cosmic will to power, then it would explain why they are more alive, in a figurative sense. I don't propose that this is necessarily what Nietzsche was thinking, that any of what I have proposed in this conclusion is what Nietzsche really thought, but it is a curious direction to imagine Nietzsche taking. There is nothing implausible to think that Nietzsche's thought may have branched out and diverged at different points. It has been a common theme throughout thought on the evolution of life for most people to assume that it is a linear progression moving towards *us*. But even if we just isolate *our* history, then we see in fact a great tree, with branches diverging off, which sometimes fail, sometimes go in another direction, and sometimes rejoin the line they diverged from. To imagine that one of these two divergent strains was abandoned, or both were abandoned, or they diverged and then fused together: all are plausible.

Equally as oversimplifying is the model of the evolution of Nietzsche's ideas in which he picked up the thought of the unconscious where his predecessor left off and continued it forward a little further. Nietzsche picked up thoughts from numerous sources (even more than I've listed here) and fused together many divergent strains, shedding and revising old thoughts and accruing new ones at all points, with a changing and evolving understanding that only ceased to change by the cessation of his productivity in January 1889.

⁹⁹ "The Unconscious is the absolute subject, substance, ego, idea, or force of the universe. It contains will and intellect, which are inseparable save in the mind of man"(Hall p 186). There is influence from Schopenhauer here for sure. Continuing "If we ask why the universe exists, the only answer is that it is a form which the Unconscious has assumed to rid itself of its own miseries. It is even deluded into the building of the brain wherein intellect is freed from bondage to the will in consciousness"(Hall pp 186-87).

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