

Nietzsche's Concept of Chaos and the Dangers of the Prophet Pose

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Nietzsche organized his thought around a series of contradictions, not systematically as had Hegel but rather stylistically, as had Voltaire. One such contradiction is that between his prophetic proclivities and his chaos theory of reality. The juxtaposition of these two aspects of Nietzsche's philosophy generates a chaotic boundary between these two opposing fields, a boundary which can be described neither as a synthesis or sublation of the two, nor as an analytic dichotomy which neatly carves Nietzsche's thinking in half. This tension is maintained and even exploited by Nietzsche, who uses this difference to symbolize the contrast between the two myths "Eternal Return" and "Übermensch," bearing in mind that Nietzsche places art above truth as a form of Will to Power. This powerful internal polarization within Nietzsche's thought absorbs all smaller local contradictions and generates regions of consistency by concentrating the consequences of minor contradictions within the loop of containment of this major tension in order to prevent them amplifying themselves explosively in vicious feedback circles. A containment of the exaggerating tendencies of his prophetic proclivities is precisely what Nietzsche achieves with his developing appreciation of the phenomenon of chaos for an understanding of the meaning of human freedom: a willing limit to understanding in the form of myths recognized for what they are: myths. For Nietzsche, the myth of the prophet is neither taken lightly in a flippant ironic (read: postmodern) stance, nor bogged down in "the spirit of gravity" in the style of Judeo-Islamo-Christian religion. This "neither-nor" stance not only insures against the kind of delirium of comprehension which engulfed Hegel, but also restores the optimistic faith in human creativity lost by Schopenhauer, for a crucial aspect of "faith in the Earth" is faith in Earthlings. This containment is thus importantly distinct from both the ironic stance taken by Hegel's romantic critics, and the metaphysical pose struck by religious prophets.

The Prophet Pose

In one of his notebooks from 1887, Nietzsche famously wrote "What I relate is the history of the next two centuries. I describe what is coming, what can no longer come differently: *the advent of nihilism.*"[WP§2]. On the simplest level of interpretation, the signs of the fulfillment of such prophesy would seem to be all around us. Since Nietzsche wrote those words, over 100 million people have died in war. About one third of the planet's species of plant and animal life have been eradicated, and military arsenals contain the nuclear fire-power to sterilize the globe, if not entirely reduce it to an asteroid belt of radioactive rubble. The 500 richest individuals now own more wealth than the 5 billion poorest. Beginning in the middle-east,¹ deforestation has now been achieved on about four-fifths of the planet's continents, and an unseen but even

¹ see the *Epic of Gilgamesh*

more devastating process is occurring on the world's sea-beds. The problem of pollution is no longer confined to localized events of spoilage, but now threatens the stability of the very atmosphere itself. The ozone layer has a hole, and even NASA admits that the arctic ice cap is breaking up, melted by warm currents from below. Here in Australia, the government seems never to tire of lamenting the annual road toll of about one thousand, but remains strangely silent on the annual suicide toll of around four thousand.

But as early as 1872, Nietzsche pointed out that the role of prophet was not one with which he was comfortable. "The 'prophet' pose", he said, "is such a presumptuous one that it seems almost ridiculous to deny that I have the intention of adopting it"² Yet so much of Nietzsche's later writings contain utterances which sound suspiciously prophetic, all the more so to the extent to which such 'prophesy' tends to have proven unnervingly accurate. Although he made clear in "The Means to Real Peace" (*The Wanderer and his Shadow* §284) what he reiterates in *Beyond Good and Evil* - that he is a pacifist who thinks that disarmament is the only means to real peace who understands the very real power of war as a metaphor for less tangible kinds of struggle - he is still often enough mistaken for a militaristic advocate of war. For example, in *The Wanderer and his Shadow* in a moment of anti-Schopenhauerian optimism he declares "Better to perish than to hate and fear, and twofold better to perish than to make oneself hated and feared - this must one day become the supreme maxim of every individual state!" (Hollingdale tr. p.381) Nietzsche gradually distances himself from such romanticism, as he comes to see that the impulse to conflict must be recognized and satisfied and cannot be avoided, but rather put in the service of life. Nietzsche's comments on war are thus not a "call to arms" but rather a metaphor for the struggle which life itself inevitably is.

There are nevertheless several passages in which Nietzsche speaks specifically and literally about military actions which to him in the 1880s seemed inevitable:

Paralysis of the will: where today does one *not* find this cripple sitting? ... For this diagnosis of the European sickness I can vouch. The sickness is spread unevenly over Europe ... It may well take more than Indian wars and complications in Asia to rid Europe of its greatest danger: internal upheavals would be needed too, the shattering of the empire into small units, and above all the introduction of the parliamentary nonsense, including the obligation for everyone to read his newspaper with his breakfast. I do not say this because I want it to happen – the opposite would be rather more after my heart: ...[but] the time for petty politics is over: the very next century will bring the fight for the dominion of the earth – the *compulsion* to large-scale politics. (*BGE* §208)

... we now confront a succession of a few warlike centuries that have no parallel in history; in short, we have entered *the classical age of war*, of scientific and at the same time popular war on the largest scale (in weapons, talent and discipline). (*Gay Science* §362)

2 *On the Future of Our Educational Institutions*, translated by J.M.Kennedy in Levy (ed.) *The Complete Works of Friedrich Nietzsche* vol.3 , introduction, p.10.

By *unparalleled* war,³ I take it that Nietzsche was making not just a quantitative claim about, say, armament-power (which of course made a quantum leap in August 1943), but also a qualitative claim about the concept of war itself. And indeed, the episodic notion of war is now yielding to a continuous and mobile event of atrocity exhibition in which the media is embedded and inextricably implicated. War is being waged not only overtly on Iraq, and not only covertly who knows where else, but also metaphorically on speeding, drugs, terrorism, obesity - this list could be extended indefinitely, for war has now become a key metaphor whose range extends indefinitely. This perplexing and endlessly proliferating array of inter-connected battles and struggles is inseparably linked with the ever-growing preoccupation with representation served by audio-visual technology in ways which Nietzsche could hardly have dreamt, and is moving its fronts of struggle for domination into ever more abstract domains. This complex proliferation of the will to dominate through destruction would certainly have amazed Nietzsche with its technological novelties, but would hardly have surprised him in its basic intent, and would certainly have only strengthened his conviction that, despite modernity's dreams to the contrary, nihilism must intensify before it can be overcome, an over-coming moreover which can be achieved only in the form of an under-going.

Modernity's 'dreams to the contrary' have taken these three main forms: democracy, communism and feminism. These are three dreams which at his most flippant Nietzsche simply mocks, but in his more profound moments he attempts to unmask as unwitting dupes of nihilism and premature arrivals of "the means to real peace." They, like the nihilism of the Christian-Islamic epoch, have been implicit nihilisms, nihilisms which have not understood themselves as nihilisms, and thus what he calls passive nihilism. But the phase which Nietzsche announces with his "God is dead" slogan is the phase in which this implicit nihilism becomes explicit, and actively understands and embraces its own nihilism.⁴

This plunge into an explicit epoch of active nihilism is not only a series of empirical events. The forms of decadence and destruction which spawn the equally nihilistic characters of the pessimistic 'good'

³Nietzsche's exact words are wars "*die in der Geschichte nicht ihres Gleichen haben*"

⁴ The earliest use of the word "nihilism" recorded in the OED is in Timothy Dwight's *Travels in New England and New York* of 1817 (vol III, p.238). Dwight, who was president of Yale 1795-1817, took the word to be synonymous with "a total disregard of all moral obligation". By 1836, the term was used by the Scottish philosopher William Hamilton in his *Lectures on Metaphysics and Logic* (ch.xvi) to characterize extreme skepticism. It was Turgenev who then popularized the word in *Fathers and Sons* (1862), using it to describe Bazarov, a character satirizing N.A.Dobrolyubov (1836-1861), a prominent St. Petersburg critic and radical positivist. But it was Kant who first coined the word in the 1794 essay "The End of All Things", as a description of Buddhists who "sit in darkened rooms exerting the utmost efforts to focus their minds on nothing, and become likewise 'empty'. From this tendency comes Lao-Tzu's monstrous system of the *supreme good*, which is supposed to consist in *nothingness*; i.e. in the consciousness derived from annihilating his personality, of *feeling* oneself flowing into and being swallowed up in the abyss of the divinity. In order to have prior sensations of this state, Chinese philosophers exhaust themselves in dark rooms with their eyes closed trying to think of and to have sensations of their nothingness. From this tendency comes the *pantheism* (of the Tibetans and other Eastern peoples), and its metaphysical sublimation produced, with the same result, Spinozism: both have a close familial relation to the very ancient system according to which all human souls *emanate* from the divinity (and are ultimately reabsorbed into it)." (Humphrey ed. pp.99-100; Ak 8:335.)

man and the optimistic 'bad' one (*WP* §43), the former foundering in the era of active nihilism whilst the latter flourishes, are themselves only symptoms of deeper mutations in the history of metaphysics, mutations moreover which cannot be understood as simply linear:

That there is a *development* of the whole of humanity is nonsense, nor is it to be wished for. The fashioning of man, drawing out a kind of *diversity* from within him, breaking him to pieces when a certain type has passed its zenith – in other words, being creative and destructive – seems to me the highest pleasure that men can have. (*Writings from the Late Notebooks* 34[179])

This glee in destruction can be seen in the the squeal of delight and the clapping of hands exhibited by the small child who has just knocked over the tower of blocks which it had toiled to make. But Nietzsche also places it not only at the motivating core of war, but also sufficiently close to the core of religion to provide Bataillie with the equipment he needed to see anew the link between religion and sacrifice as implicated in the very concept of the economy. Although for Nietzsche sacrifice is a far broader phenomenon,⁵ he nevertheless thoroughly unmasks the "defense" ruse in the "The Means to Real Peace" aphorism as a disguise hiding the need to satisfy the thirst for the occasional conquest.

Nietzsche's "prophetic" confidence concerning the auto-devaluation of nihilism is thus grounded in the knowledge that the human animal will inevitably attack the ensemble of values characterizing Platonic metaphysics, which then *must* disintegrate under the internal tension of its own incoherence. Its disintegration, whilst empirically "future," is conceptually *present*. To see how this is so, we need to look more closely at Nietzsche's analysis of nihilism.

Nietzsche's description of nihilism involved three aspects, which appear disparate but are actually connected in essential ways. Nietzsche's three main descriptions of nihilism are as 1) uncritical historicism; 2) mendacious illusion; and 3) the auto-devaluation of ultimate values.

In the *Birth of Tragedy* and especially the essay "On the uses and abuses of history for life", the young and still somewhat romantic Nietzsche works out his attitude to history, a discipline which he sees as both essential and dangerous. Essential because to live ignorant of history is to yield culture up to a directionless drift at the mercy of currents which barely reach consciousness let alone criticism. Those at the opposite extreme fall into either the antiquarian or the monumental pitfall, uncritically worshiping either antiquities for their own sake regardless of their value for life in the present, or monuments to past events just because a monument exists to their memory. Culture uncritically beholden to its history is overwhelmed by that history's sheer weight, and so although perhaps marvelous in scholarship, is miserable in reality, and so actually decadent. The growth of the archive explodes uncontrollably, and the thinker is buried beneath an

⁵ He wonders for instance whether it not an element of *every* deliberate action in *Human All Too Human* "Assorted Opinions and Maxims" §34

unscalable mountain of literature.

A *critical* history in contrast is one dedicated to the service of life: the archive must be pared to its core of works worthy of monumental respect and antiquarian passion. Anything else inserts a kind of screen or cloak between awareness and reality, substituting mendacious illusions in place of the real world, sacrificing human potential to maintain the power of the mediocre. This brings us to the second description of the situation Nietzsche calls nihilism: a mendacious illusion substituted for reality, or, as he puts it, “how the real world became a fable.” Philosophical dreams of a destruction-less utopia said to be more real than this one, such as the Christian heaven, the Islamic Paradise, the Buddhist Nirvana or the Platonic realm of changeless ideas, are paradigm cases of nihilism in this sense. However, these ersatz ultimates are inevitably unstable in actuality. The ensemble of values which embody the aspirations to instantiate utopia are actually incoherent, and so are incapable of finding real satisfaction. This is not to say simply that they are self-contradictory. For reasons to which I shall return, all ensembles of ultimate evaluations must be able to negotiate and incorporate internal contradiction. But a stable ensemble of ultimate values incorporates contradictions in a way which concentrates rather than inflates the contradictions consequences, containing and utilizing rather than amplifying their destructive power.

And this brings us to Nietzsche’s third description of nihilism: that “the highest values devalue themselves”, i.e. judge against each other. Groucho Marx's old quip that he wouldn't join any club willing to have him as a member puts the concept of an auto-devaluing value ensemble in a nutshell. Thus did Christianity, to pick only the most obvious example, “perish of truth,” the value of truthfulness having been established only through its advent. This threefold face of nihilism thus reveals the ways in which reality is distorted and buried beneath a mass of confusions linked to the will to power by complex histories of obfuscation and exploitation. Those three of modernity’s fundamental projects mentioned earlier which aim to overcome these metaphysical confusions with optimistic teleologies of harmony (democracy, communism and feminism) cannot overcome the implicit nihilism against which they react, and thus by which they are defined, in so far as they cannot think the depths of nihilism’s roots. Each underestimate the “abysmal antagonism” at the roots of the constitution of our experience. Thus Nietzsche himself gradually grows wary of his own dream of “real peace,” and realizes instead that the human impulse to destruction *must* be satisfied in *some* way, so it had better be a creative one. Creative destruction lies on the level of freedom which Nietzsche calls “free from”: the juvenile, reactive level, important in so far as chains must be broken and shackles shed, but inevitably delivering the emancipated mind over to the yet unanswered question “free *for*” what? In order to elaborate Nietzsche's new way of conceiving freedom, we need now to return to what I have called his chaos theory of reality.

Nietzsche's Chaos Theory of Reality.

The phenomenon of chaos always surrounds us. In the old days, for example, when people smoked cigarettes *inside* buildings where the air is still, sometimes a cigarette was left sitting alight on an ashtray. A thin plume of smoke would rise smoothly upwards to a certain point, and then this smooth laminar flow would break up into a turbulent chaos of whirling eddies. A parallel phenomenon is seen when a tap is turned down low, but not so much that it starts to drip. A laminar region of continuity in the stream of water terminates in a fringe of chaotic dissipation of the energy running through the region of smooth continuity, as also can be seen in a mountain stream where it changes from smooth to "white" water.

This phenomenon is seen across scales from the galactic to the molecular, and in contexts from the utterly inanimate to the entirely political. A kingdom for example which has stood for centuries in a dynamic balance enabling the equilibrium we call a "state" is overthrown by revolutionary discontent, and enters a period of anarchic power struggles and violent disorder. A protest which had been peaceful and non-violent suddenly turns nasty, and violent disarray breaks out. The temperature of water in a saucepan on the stove increases smoothly in direct proportion to the energy input, until it reaches 99.9° C, at which point the laminar flow of energy fragments into a chaotic phase we call "boiling," in which small pockets of water suddenly undergo phase transition from liquid to gaseous state, and quickly expand to a dynamic and unstable equilibrium state which we call a "bubble." In the phase called "boiling," the chaotic creation of bubbles dissipates the flow of energy through the system, and any further increase of energy into the system does not increase the temperature of the water, which remains at 100° C (unless the pressure is increased with a lid), until it completes the phase transition to gas and escapes as steam.

Until the 1960s, physics actively ignored chaotic phenomena, equating the understanding of laminar flow (such as Newton's Laws of Gravitation, Kepler's Laws of Planetary Orbit, Galileo's Laws of Motion including the concept of the continuously varying quantity called momentum and the inseparably linked concept of inertia) with an understanding of nature as whole. Engineers however did not have the theoretician's luxury supplied by phrases such as "ignoring drag and friction...". Fluids flowing through pipes for example, or gasses flowing across wings, exhibit states which vary continuously only up to (or down to) a specific point, beyond which flow fractures into discontinuity and the energy flowing through the system changes phase from an organized direction into a chaotic dissipation. Or in layman's terms, the plane crashes or the pipe explodes; obviously events engineers are interested in avoiding rather than ignoring. So it was that chaos theory grew out of engineering in both the mechanical and the electrical senses, the phenomena of static or "noise" being the kind of chaos come across by electrical and electronic engineers in say radio

astronomy or hi-fi sound system design.

A way to quantify chaos arrived when Benoit Mandelbrot invented fractal geometry, thereby providing scientists with a way of expressing something Edward Lorenz had struggled to show in his 1963 paper on chaos containing a diagram of what later researchers would later christen a "strange attractor". Linear physical systems exhibit what are called "attractor" states: states of dynamic equilibrium in which the forces defining the system are balanced in a stable state. A star with planets in orbit (such as our solar system) has settled down into such a state, and will remain in that state until an external influence or internal factor (such as the star reaching the end of its nuclear life-cycle) perturbs the system sufficiently to disrupt that balance, and send it into a chaotic phase of alteration, until it either re-achieves the attractor-state, or finds a different attractor-state. If the energy input is too great, the destabilization may be so great that the system itself dissipates. But if the energy input is not too great, the outbreak of chaos serves to dissipate the excess energy, and facilitates the return to stability.

Of course chaotic phases of systems do not themselves stabilize in a dynamic equilibrium. Such stabilization is by definition the eradication of chaos and the re-establishment of order. However, the central discovery which amounted to the invention of Chaos Theory is that each and every chaotic phase of a system exhibits a kind of mathematical fingerprint. By characterizing the *way* a given chaotic alteration occurs, pattern can be not only seen but actually mapped in chaos, although of course specific chaotic changes cannot be *specifically* predicted. The laminar flow of the plume of cigarette smoke breaks apart into an unpredictable number of swirling eddies at a point whose exact location is not predictable in advance. However each and every swirling eddy that does occur exhibits a strong similarity to each and every other swirling eddy. That swirl can be described mathematically with the use of fractal geometry, and compared to the mathematical description of the somewhat different swirls in the chaotic break-up of the water-trickle from the tap. The system is attracted to a "state" which is strange, in that it is not really a "state" at all, but a chaotic fragmentation into pieces which nevertheless resemble one another. This resemblance is that system's "strange attractor," strange in that it does not stabilize the system into a state of equilibrium (static or dynamic), but still attractive in that the system does hold together and dissipate the excess energy, thus allowing the system to then either re-achieve its previous dynamic equilibrium state, or else settle into a new one.

As early as "On the uses & disadvantages of history for life" sections 9 & 10, Nietzsche had entertained the idea that reality "in itself" is in fact chaotic. In that essay, the over-proud European of the nineteenth century is challenged to compare the heights of his capacity for knowledge with the depths of his incapacity for action. "It is true," says Nietzsche, "you climb upon the sunbeams of knowledge to heaven, but you also climb down to chaos." (p.108). A few pages later he says that behind the order of history is the

chaos of the masses (p.113). And then in closing the essay he reiterates what he had explained at some length in the *Birth of Tragedy*, namely, that behind classical Greek civilization there was a “chaos of foreign, Semitic, Babylonian, Lydian and Egyptian forms and ideas ... somewhat as ‘German culture’ and religion is now a struggling chaos of all the West and of all past ages” (p.122). History thus has its background of chaos in both a diachronic and a synchronic sense. The Greek achievement was to learn to "organize the chaos," not by resisting it, but rather by recognizing only what of it was useful, and ignoring the rest. Nietzsche concludes: “This is a parable for each one of us: he must organize the chaos within him by thinking back to his real needs.” (p.123)

The romantic notion of “real needs” and the classicism of Nietzsche’s youth is dropped as his perspective matures and deepens. The simple unity of the world (and hence history) is increasingly problematized by Nietzsche, in the form of his realization of the importance of a chaotic texture to a creative cosmos. In the *Gay Science* Nietzsche warns against the temptation of thinking of the world as a whole either as an organism or as a machine: reducing our conception of the whole to one function, operation, or even location would be to severely underestimate its complexity:

The astral order in which we live is an exception; this order and the relative duration that depends on it have again made possible an exception of exceptions: the formation of the organic. The total character of the world, however, is in all eternity chaos – in the sense not of a lack of necessity but a lack of order, arrangement, form, beauty, wisdom, and whatever other names there are for our aesthetic anthropomorphisms. (*Gay Science* §109, p.168).

Although still conceived as a *lack*, the concept of chaos here employed is developing greater definition and a more affirmative connotation. In §277, for example, he speaks of “the beautiful chaos of existence”⁶, and in §322 recognizes that an excess of systematicity in understanding obscures the essential, not mentioning but obviously thinking of Hegel:

Those thinkers in whom all stars move in cyclic orbits are not the most profound. Whoever looks into himself as into vast space and carries galaxies in himself, also knows how irregular all galaxies are; they lead into the chaos and labyrinth of existence.

But it is only in *Thus Spake Zarathustra* that a fully affirmative conception of chaos as the font of possibility is announced. In the section 5 of the Prologue Zarathustra famously proclaims “I say unto you: one must still have chaos in oneself to be able to give birth to a dancing star. I say unto you: you still have chaos in yourselves.” (p.129) Thus we read in *Beyond Good and Evil* §224 that “we ourselves are a kind of chaos”. Here at last we have Nietzsche's balanced conception of chaos's interacting affirmative and negative sides, its creative power along with its destructive power. In many of the notes contained in the notebooks collected

6 In “Nietzsche’s conception of chaos” (*The New Nietzsche* pp.135-141), Jean Granier has said “If the mask is beauty, then truth is the ugliness of chaos.” But nowhere does Nietzsche call chaos ugly: on the contrary, he speaks of it in terms connected both to the concept of beauty and the concept of the sublime.

under the title of *The Will to Power*,⁷ Nietzsche works out the ramifications of this chaos theory, and in particular the way in which it explains the inadequacy of any form of absolutism. Building a structure into chaos is obviously something that can be done in infinitely many ways, but not in just *any* way. Possibilities arise in an unpredictable manner, but are concrete and discrete possibilities nonetheless, and possibilities are essential to the construction of structure. *WP* §515: “Not ‘to know’ but to schematize – to impose upon chaos as much regularity and form as our practical needs require.” (p.278) The “world in itself” cannot be known, not because it exists in some mysterious beyond, but because it is chaos, and chaos “in itself” cannot be known. Chaos must rather be viewed through some kind of lens or grid of relative stability, and what then is actually perceived is the *contrast* between the predictability of the frame and the unpredictability of the enframed. But the main thing about chaos is that it can be gone into in infinite detail.

Unaware, I’m sure, of Nietzsche’s attempts to get his mind around the concept of chaos, Benoit Mandelbrot invented fractal geometry in the 1970s in order to do just that. Building on Richardson’s and Ruelle & Takens’ studies of various manifestations of the phenomenon of turbulence, he posed the seemingly simple question: “How long is the coastline of Britain?”⁸ For any stretch of coast we can draw a straight line between its end points as a first approximation of its length. Then moving the midpoint of the line to the actual location of the coastline, we arrive at the next approximation by adding the two new lengths of the halves. Applying that rule recursively, the ever shorter halves of halves grow ever closer to approximating the real shape of the coastline. But the thing is, if no lower limit is set to the bisectable length, then the process continues infinitely, returning the counterintuitive result that the coastline of Britain is infinitely long. The only way to get a determinate length is to set an arbitrary minimum to the bisectable line length, and, as Mandelbrot points out, this means “The observer inevitably intervenes in its definition” (p.452). Mandelbrot’s point is that reality supports infinite detail at every point, and so although the observer is not the source of structure, he is the arbitrator of it. That is to say, it is up to him to stop at a degree of detail appropriate for the task at hand. A map of beaches for a tourist brochure will need a relatively coarse degree of resolution; a shipping chart a finer one, but not too fine; a study of microhabitats of microscopic marine organisms one finer still. There simply is no absolute answer to the question, “How long is the coastline of Britain?” But that does not entail that for any given decision on minimum scale of resolution there is not a determinate answer to that question. Put another way, we can say that the choice of scale alters the object experienced.

7 A less mutilated selection of these notebooks is now at last available in English under the title *Writings From the Late Notebooks* ed. Rüdiger Bittner, tr. Kate Sturge (Cambridge, 2003), which however unfortunately lacks a cross-referencing index with *The Will To Power*.

8 B.Mandelbrot, “How Long is the Coastline of Britain” reprinted in *The Fractal Geometry of Nature* (1983); I cite from its reprinting in T.Ferris (ed) *The World Treasury of Physics, Astronomy and Mathematics* (Boston: Little, Brown & Co. 1991) pp. 447-455.

Above I quoted the first sentence of *WP* §515: “Not ‘to know’ but to schematize – to impose upon chaos as much regularity and form as our practical needs require.” That note continues:

In the formation of reason, logic, the categories, it was *need* that was authoritative: the need, not ‘to know’, but to subsume, to schematize, for the purpose of intelligibility and calculation – (The development of reason is adjustment, invention, with the aim of making similar, equal – the same process that every sense impression goes through!). No pre-existing ‘idea’ was here at work, but the utilitarian fact that only when we see things coarsely and made equal do they become calculable and usable to us.

Understanding means hitting upon the appropriate scale, or degree of resolution for a specific aim. In other words, a set of evaluations pick out a determinate “slice of” or “take on” reality. But the reality “in itself” cannot be reduced to that slice or take, and understanding always involves ignoring no less than it involves paying attention:

Just as there are many things a general doesn’t want to know, and must not know if he is to keep hold of his overall view, so in our conscious mind there must be *above all* a drive *to exclude, to chase away*, a selecting drive – which allows only *certain* facts to be presented to it ... Our logic, our sense of time, sense of space are prodigious capacities to abbreviate, for the purpose of commanding. A concept is an invention to which nothing corresponds *wholly* but many things *slightly*. (*Writings from the Late Notebooks* 34[131])

Reality is the source of information concerning possibility, the source in sensation which makes of perception something other than hallucination. But, and this is the crucial point, “our sense of time” itself must be understood as an *abbreviation*, amenable in principle to revision along with all of our understanding.

Thus Nietzsche’s robust sense of reality is just as important as his epistemic perspectivism. There can be no absolute history anymore than there can be an absolute map of a given region in space. But that most emphatically does *not* mean that any history is as good as any other, any more than it means that any map is as good as any other. Arbitrarily many maps can be made of a chaotic manifold, but that does not mean that any arbitrarily made map applies to it. Reality dictates information, and interpretation, although infinite, must always in some sense conform to its data. The simile applies equally well to history. Thus Christian-Platonic metaphysics is mendacious not absolutely, but only relatively. In fact, this metaphysics is relatively mendacious precisely in so far as it claims for itself the impossible status of being absolute. This cloaks the deepest truths about possibility which we are able to think by serving as a ludicrous guide to where we can go and what we can do, distracting us from our actual possibilities, and leading us into their neglect in the wild-goose chase called decadence.

And so to think of the overcoming of nihilism as an absolute event in a univocal history is actually to be duped back into the confusion at the root of the nihilistic concealment itself. The inexhaustible detail of actual reality entails an infinite possibility of re-reading and an infinite task of interpretive schematization. Metaphysical nihilism never was the absolute hegemony Nietzsche feared in his more paranoid moments.

But through this confusion in which Nietzsche knew he was entangled shone moments of insight into the discovery that the plurality of reality always allows an interpretation to be found in which the meaning of the history of nihilism is the result of looking at reality in the wrong way. If this is so then the task of completing the overcoming of nihilism's active phase is essentially one of interpretation – i.e. of finding the perspective from which the possibility of a coherent ensemble of ultimates becomes a real possibility.

Nietzsche saw clearly that the demand to eradicate contradiction was itself an element of the reality-concealing illusions of metaphysical nihilism. The deeper one sees into reality, the greater the reality of contradiction impresses itself upon one: the challenge is to establish a coherent negotiation of the relevant contradictions. In *WP* §§515-6, Nietzsche locates the fear of contradiction in psychology, not logic. But unlike Hegel, Nietzsche sees no reason to presume that this emergence of contradiction should be smoothly homogeneous and systematically regular. On the contrary, that assumption also amounts to nothing other than a version of the misguided absolutist assumption which made Christian-Platonic metaphysics relatively mendacious. What in fact a perspectivist-chaotic metaphysics should expect, and the most for which it could hope, is that reality would yield up 'strange attractors'. Each perspective upon reality is able, despite reality's infinite complexity, to give rise to regions of stability – maps of possibility which cohere in structures of thought which resonate harmonically rather than explosively. This is possible because 'strange attractors' act as contradiction 'black holes': singularities which attract and absorb all surrounding contradictions, thereby generating regions of consistency. In this way, contradictions are negotiated as they arise, clearing regions of stable coherence:

No limit to the ways in which the world can be interpreted; every interpretation a symptom of growth or decline. Inertia needs unity (monism); plurality of interpretations a sign of strength. Not to desire to deprive the world of its disturbing and enigmatic character. (*Will to Power*, § 600)

So we can see that the scientific development of what is now called Chaos Theory resonates closely with Nietzsche's intuitions concerning the duplicity of chaos, which plays both destructive and creative roles in the dynamics of the cosmos as a whole. The third law of thermodynamics captures chaos' destructive aspect, stating that order tends to dissipate and that laminar flows inevitably tend to disintegrate. But as Nietzsche qualified and Chaos Theory has now quantified, this emergence of chaos also plays a creative and affirmative part in nature's dynamic of balances, for the chaotic phase of a system acts as a kind of "shock absorber", managing the dissipation of excess energy and allowing the system to return to the same stable state, or to find a new one. The third possibility - that the excess energy is too great to be dissipated even by a chaotic phase - leads to the outright destruction of the system *per se*. Like the early automobiles with solid rubber tyres and no suspension, a system with no built-in play, no allowance for a built-in phase of contained chaotic "bounce", is dangerously rigid and liable to collapse due to a lack of flexibility. Pneumatic tyres and a shock-

absorption system between the wheels and the chassis were such an advance on previous designs precisely because they were a way of coping with the unpredictable advent of chaotic factors (such as bumps and holes in the road) by tolerating and allowing their play in order to dissipate excesses of energy and return the perturbed vehicle to the laminar flow called "driving". This invention did not make crashes impossible, and every tyre or shock-absorber has its breaking-point. But within its balanced range of operation, these devices make crashes far less likely. This is not to rob driving of its "disturbing and enigmatic character" - on the contrary, it is to enable a deeper investigation of the infinite complications arising on the turbulent boundary between the boring laminar flow of a car nowhere near its limits on a smooth road surface, and the total demise of the system we call "crashing". So fascinating is this boundary, that an entire industry, part sport, part entertainment, called "motor racing" is devoted to the pursuit of the increase in the feeling of power to be obtained by riding this edge.

Returning in conclusion then to the tension between Gay Science #316 and Will to Power #90, it is important to note that the horse has a symbolic rather than representational relation to the approaching storm. It would be ludicrous to imagine that the horse sees into the future and has a "vision" of the coming storm like a movie on a screen: their sense of unease is not a matter of representation, but of a symbolic sense, or feeling that "something's wrong". And once again, science is only slowly catching up with Nietzsche's instincts, and discovering some fascinating hidden mechanisms which account for such phenomena of animal "precognition", such as infrasound (bass sounds too deep for the human ear), ultrasound (treble sounds too high for the human ear), a possible magnetic sense not present in humans, and even electro-magnetic sensitivities we are yet to comprehend. Nietzsche's use of this analogue to describe the situation of the human prophet is thus related in a complicated way to the religious understanding of the phenomenon of prophesy. His position is not at all that of the cynic who sees nothing in the phenomenon but groundless claims and sheer self-delusion, but is rather based on the insight is that superstition is a function of perspective. Who knows what bizarre stories the "Hhuns" in book four of Gulliver's Travels (the race of talking horses who enslave the race of sub-human "Yahoos") might tell themselves about such equine "precognitive" capacities. But whatever deluded explanations the Hhuns told themselves of their own abilities, nothing could get around the fact that nothing supernatural at all was actually going on; it only seems that way for animals with an inadequate appreciation of the true complexity of nature - not realizing, for example, that their sense of sight was a tiny keyhole through which they peered into a massive electromagnetic spectrum. Note that in GS#316 Nietzsche says that uncanny animal sensitivities are a "parable" (*ein Gleichness*) for the phenomenon of religious prophesy, which is moreover experienced by the prophet as a kind of *pain*. The human prophet does not literally sense the infra-sonic rumble of distant thunder, but rather figuratively the infra-conceptual turbulence of contradictions harbored deep within ensembles of uncritically-held values, which feeling is however only able to manifest itself in accordance with the inadequate conceptual apparatus

of the sensitive individual. To take the content of such "prophecy" as a representation is to distract oneself from thinking about prophecy's symbolic significance.

The differentiation between the insensitive majority and the sensitive minority stands as an icon of our question as a whole: what do animals symbolize concerning our own possibilities? And what does the human animal itself symbolize? - is man an analogue of that which shall overcome it? Perhaps the thought of the *Übermensch* is symbolic of a "strange attractor" - i.e. not a telos at end of a laminar flow called "history", but a "drawing out" of a chaotic inner diversity and a re-contextualization of experiences that we do not really understand at all but are nevertheless highly valuable.