Nietzsche Loves You: A Media-Technological Start-up

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In the absence of a transcendental seal, philosophy and science turn to other qualities to clear their paths and warrant their integrity. Friedrich Nietzsche has to steer between God and ego to keep thinking clean-too much God or too much ego is destructive of the scientific aim, and liable only to produce catastrophic imaginary or narcissistically warped aberrations. In any case, God rarely dispenses permits for scientific adventure, though philosophy has been known to suck up to any power of historical moment. To keep thinking on track, Nietzsche mobilizes love and personality. Perhaps somewhat surprisingly for us moderns today, who associate experiment with some degree of desubjectivation, the experimental imagination, as Nietzsche calls it at one point, implies a strong personality. It was Schelling who once remarked that the question of personality was egregiously left out of the philosophical field. Nietzsche, who involves biographemes in the index of philosophical demands, skims off a notion of personality to make his argument, such as it is, stick. The lack of personality always takes its revenge, Nietzsche writes in "Morality as a Problem":

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Discourse, 31.1 & 2, Winter & Spring 2009, pp. 161–179. Copyright © 2010 Wayne State University Press, Detroit, Michigan 48201-1309. ISSN 1522-5321. A weakened, thin, extinguished personality that denies itself is no longer fit for anything good—least of all for philosophy. All great problems demand great love, and of that only strong, round, secure spirits who have a firm grip on themselves are capable. It makes the most telling difference whether a thinker has a personal relationship to his problems and finds in them his destiny, his distress, and his greatest happiness, or an "impersonal" one, meaning that he can do no better than to touch them and grasp them with the antennae of cold, curious thought.¹

Part of a lover's discourse and a destinal commitment, the Nietzschean motif of the strong personality determines the sturdiness of thought. One enters into a relationship with those problems that solicit urgent attention. One's distress and happiness abide in the enrapturing movement of their idioms and silences. The sustained engagement with problems cannot be put into the hands of those who have excused themselves from the space of a vital encounter by means of ascetic subtractions or anemic inquiry. Nietzschean science scorns cold objectivist observation, limp grapples, requiring instead something on the order of an affective selfdeposit and intense commitment. Prompting the encounter of great problems with great love, scientific curiosity and experimental imagination trace their novel routes. Nietzsche appears to envision a mapping of scientific study that is auratically pulled together by the love borne by a strong personality; buoyed by love, such a science could not degenerate in principle to a hate crime against humanity.

Yet the borders separating love from hatred are left untouched by Nietzsche: he does not consider the cold prompters of love or the ambivalent underworld of acts of love in world or science. He leaves aside the possibility that the most hateful turn is often fueled by love of a nameable cause or country. When Nietzsche installs love as a motor force behind the technoscientific urge, he does so to open the scene for an unprecedented generosity of being capable of melting the moral ice age and a history of intellectual arrests; until now, knowledge has been deterred from supporting the limber stretch exercises of human beings. To this end, love supplants the deep freeze of moral valuations, rendering the scientific pursuit on a par with what is felt to be irresistible. Why is it, Nietzsche asks in this section of *The Gay Science*, that "I see nobody who ventured a critique of moral valuations; I miss even the slightest attempts of scientific curiosity, of the refined, experimental imagination of psychologists and historians that readily anticipates a problem and catches it in flight without guite knowing what it has caught" (GS, 284). Disposed by great love to devoted study, the

experimental imagination does not settle on one object or line of inquiry but, as part of Nietzsche's vocabulary of *force*, it tends to shift ground and change objects with a sometimes alarming degree of regularity. In fact, love, to be true to itself, has to carry the fissuring break within its travels. It cannot be otherwise if it is to follow the itinerary set by the laws of becoming.

The experimental imagination is exceptional in several ways. Taking risks but also exercising prudence—practicing, in Nietzsche's famous sense, the art of living dangerously—the experimental cast of being does not so much preview the advent of a technobody (equipped with the antennae of cold, curious thought) but, in the first place, reflects a vitality that disrupts sedimented concepts and social values. Such a force of disruption goes against the grain of what has been understood as praiseworthy. Promoting meanings that have been left in cold storage for centuries, society values unchangeability and dependability. It rewards the instrumental nature (the character of dependable, computable qualities, i.e., someone you can count on) with a good reputation. On the other hand, efforts involving self-transformation and relearning, acts that make oneself somewhat unpredictable in this regard, are consistently devalued:

However great the advantages of this thinking may be elsewhere, for the search after knowledge no general judgment could be more harmful, for precisely the good will of those who seek knowledge to declare themselves at any time dauntlessly *against* their previous opinions and to mistrust everything that wishes to become *firm* in us is thus condemned and brought into ill repute. Being at odds with a "firm reputation," the attitude of those who seek knowledge is considered *dishonorable* while the petrification of opinions is accorded a monopoly on honor! Under the spell of such notions we have to live to this day. (*GS*, 238)

While science itself was seen to count on the strength of prediction, the scientific personality needs to evade the temptation of predictability. Prediction should not be ruled by an internal dictator or dictionary of obligations. If one stayed in one's assigned grooves, everything would harden into place, with no suppleness to assure necessary shifts and turnarounds. In addition to petrification, one also always risks softening, effeminating, so to speak. Yet if Nietzsche had to choose or lose, he would promote something that comes close to the texture of the softening that opens and glides, allowing for sudden shocks and slippages. The scientific personality, spurred on by love, needs to be able to flow in order to move past anything that establishes itself firmly. The surge vitality provided by love drives the experimental disposition beyond its assumed goals.

Submitted to constant critique and revision, the experimental disposition is capable of leaving any conclusion in the dust when it obsolesces, turns against itself, or proves decadent; when a result is "arrived" at, the experimental imagination suspends it in its provisional pose of hypothesis. The hypothetical statement submitted to critique does not belong to a class of positivistic certainties or objective observations, since it is never loosened from the affect that brought it into view. A truth or probability was, Nietzsche stresses, formerly loved. The scientific imagination is cathected on the hypothesis and itself becomes different as the "object" changes. While it seems as though reason prompts a process of decathexis, it is in fact life and its production of needs that is responsible for criticism and revision. Thus "In Favor of Criticism" states the following:

Now something that you formerly loved as truth or probability strikes you as an error; you shed it and fancy that this represents a victory for your reason. But perhaps this error was as necessary for you then, when you were still a different person—you are always a different person—as are all your present "truths," being a skin, as it were, that concealed and covered a great deal that you were not yet permitted to see. What killed that opinion for you was your new life and not your reason: you no longer need it... When we criticize something, this is no arbitrary and impersonal event; it is, at very least very often, evidence of vital energies in us that are growing and shedding skin. We negate and must negate because something in us wants to live and affirm—something in us that we do not know or see as yet.—This is said in favor of criticism. (*GS*, 245–46)

Not reason but life requires the serial proliferation of amendments and retractions, burying dead opinions and promoting the growth of new critical needs. To the extent that the personality triggers truth and guns for error, there will be no standstill or momentous revelation that can claim eternity as its backdrop. Every collaboration of truth and error is determined by the wideranging difference over time of the personality to itself. And even where a former truth must now be discarded, Nietzsche, ever mindful of resentful potentialities, reminds us that it was once loved and urgently needed by a personality that consistently outgrows itself. The experimental disposition is thus somewhat on the run, whether passing through nonknowledge, and catching the unknowable in the outfield of inquiry, or because something within us compels negation and further negation as a condition for living and affirming. Unknowable, and as yet unseen, something within us could come from the future or return from a subterranean layer

of past inscriptions. Still or no longer human, we—or rather "you," Nietzsche says "you"—are molting, shedding skin like so many truths cast off by *The Gay Science*. Your body transforms, engineering a new era of sacrifice. In an anthropological sweep, Foucault once saw things moving in the direction of epistemic sacrifice: "Where religion once demanded the sacrifice of bodies," he writes, "knowledge now calls for experimentation on ourselves, calls us to the sacrifice of the subject of knowledge."²

Testing 1 . . . 2 . . . 3 . . .

Much has been said about Nietzsche's statement that we need only to invent new names in order to create new "things." In that famous aphorism, however, he adds to the list of power switches the notion of probabilities: "We can destroy only as creators-But let us not forget this either: it is enough to create new names and estimations and probabilities in order to create in the long run new 'things'" (GS, 245). In the long run, probabilities and estimations weigh in as importantly as names when it comes to invention's power over new things. Nietzsche places things within quotation marks, which in this case expands rather than contracts the cited domain: in place of limiting himself to substantial objects, he leaves open the definition of what can be expected to come from the creation of new probabilities, names, or estimations. In the passage discussed above, Nietzsche put probability on the same level as truth. Both truth and probability are linked to love, which furtively documents the affective holdings of the gay scientist. The point to be held onto at this juncture, beyond the tempting psychologization of both terms, is the way Nietzsche smuggles probability into the neighborhood of truth in order to assert its rights of equal residency: "You shed formerly loved truth or probability" (GS, 245-46).

Before continuing to explore the itinerary of the experimental disposition in the Gay Sci, I would like to connect the questions that have been raised with a number of pressing contemporary claims. It is not that I want to trace some loveless relations to truth and probability but, in order to see the innovation of Nietzsche's scientific incursion, I find it necessary to change channels and skip a century, to fast forward to where Nietzsche is used and betrayed. This commercial break will allow us to reenergize the reading of Gay Sci with a graft from its own future passageways. If the Gay Sci has sought us out and is meant to speak to us today, then it will have had to stand the test of time, which does not limit the text to a vulgar little quiz involving applicability and whether or not one "buys it," but is disclosive of the way in which it relates to itself as its own future, its own labor and announced commitments. I will let it recharge itself as we borrow from the future of Gay Sci in order to read its past.

Proofs ... Proofs ... Proofs ...

a) In a work linking philosophy with the conceptions and technologies of artificial intelligence (AI), a concerned editor outlines the way in which AI researchers "have recently found themselves writing, without any conscious intent, what philosophers recognize as philosophy."³ The true source of apprehension, expressed in the introductory phase of the volume, may involve another dilemma, effected "without any conscious intent," reflected namely in the section title, "How Philosophers Drift into Artificial Intelligence" (AI, 1). Despite considerable emphasis on drifting, randomization, fuzziness, and interference, the work signals its anxiety over philosophy's nearly random drift into the new territory. The unwarranted interference risks subverting coherent programming and blunting the concerted demand for rigor upon which AI discussions appear to be based. The origin of the demand for rigor, which has conditioned twentieth-century Anglo philosophy, "is the positivist's requirement that theories be testable. At the very least, a respectable philosophical theory should be stated with sufficient precision that one can tell what it says about something and whether its predictions about that subject matter are borne out" (AI, 1). The minimal requirement of rigor meant that "respectable philosophy" (respectable is repeated a number of times) had to be capable of being articulated in the formalism of logic: "As time passed, however, the awareness grew that formal rigor was not sufficient to guarantee unambiguous content or to ensure sufficient philosophical clarity to meet even this minimal criterion of testability.... There must be more to philosophical analysis than logical formalism" (AI, 2–3).

The incursion of philosophy into areas that are technologically fitted risks deflating the rigor on which so much is staked. It is as if rigor maintains the phallus that assures the rule and proper place of "respectable philosophy." Yet there is danger ahead in the form of disrespect for completion and clarity, the handmaidens of rigor. In some cases contemporary philosophers have been led "to eschew rigor altogether. Even in investigations shrouded in a façade of formalism, there is often a lamentable tendency toward handwaving when the going gets difficult. The trend is toward painting pictures rather than constructing detailed theories. Perhaps most contemporary philosophy is too vague and unfinished to satisfy even a minimal requirement of testability" (AI, 4). Testability furnishes the uninterrogated core of rigor. It puts out the call for a new mode of thinking that could be aligned with the demand for rigor, which remains equally uninterrogated but seems to be linked to a notion of computational realizability: "To some of us, the concepts and technology of artificial intelligence provide at least a partial resolution of the problem of ensuring at least some degree of testability. As Paul Thagard (1988) has pointed out, artificial intelligence liberates us from the narrow constraints of standard logic by enforcing rigor in a different way, namely via the constraint of computational realizability." This example is especially useful to us because it shows how "rigor" enables the displacement of truth by testability:

Computational realizability is no guarantee of truth or of explanatory interest, of course, but it does guarantee a certain kind of rigor. Those philosophers who have begun to test their theories by trying actually to implement them in computer programs have found that the discipline required almost invariably reveals ambiguity, vagueness, incompleteness and downright error in places where traditional philosophical reflection was downright blind. . . . Furthermore, a running implementation of a theory makes it possible to apply the theory to more complicated test cases than would be possible by armchair reflection, and experience indicates that this usually reveals counterexamples that would not otherwise have been apparent. (AI, 4)

Endorsed by "experience," acts of reflection are devalued and overthrown for the asserted virtues of implementation. The lynchpin of this operation, "rigor," enters the picture unrigorously, however, as only "a certain kind of rigor." What kind of rigor is a certain kind of rigor? What does it mean to "guarantee" a certain kind of rigor? In short, what is being guaranteed if not the ability itself to guarantee where truth has been weakened or explanatory interest diffused? Everything rests on the promise of a certain kind of rigor. But at what price is this flimsy ground constructed? All this great white Anglo hope for philosophy can be maintained as long as foreign invasions by ambiguity, aleatory eruptions, incompleteness, and other forms of parasitism are revalued. This sort of revaluation or indeed repression belongs to a "respectable philosophy" even as it loses ground with respect to the aforementioned rigor. Importantly, the test is posited on the side of a cleaner, more rigorous, unassailable cognitive value. Testing in itself is never questioned

but posed, necessarily, if the argument is to work, as the infallible ground for yielding determinations and often indulging the metaphysical fantasy of completion.

But what if testing were from the start itself built upon notions of constitutive incompletion, ambiguity, blind runs, and radically provisional cognitive values? In order to carry on the respectable colonization of discourse of which philosophy, that certain kind of something which drifts into AI, would be the unconscious, it is essential at once to rely on the test and to leave its premises untested-as if the test could provide an unquestionably solid ground for overtaking reflection and other philosophically triggered interferences. When promoting AI as the advanced frontier for philosophy, the introduction slips in a "partial" guarantee: "A (partial) guarantee of philosophical rigor and clarity is not the only attraction artificial intelligence holds for philosophers" (AI, 4). What would a "(partial) guarantee" be? Is it respectable? Sound? Are rigor and clarity partially guaranteed or does the guarantee cover partial rigor? Are respectable philosophers "attracted" to fields? How rigorous is it to rely upon attraction? "The discipline of programming also leads to a shift in perspective on traditional issues. It invites—or rather requires—one to adopt what [Daniel] Dennett (1968) calls the design stance toward the mind" (AI, 4).

Dennett's stance supplants inquiry into the nature of rationality with inquiry into how a rational agent might be designed: "Rather than ask under what conditions someone can be said to know something, we are led to ask how an agent might be designed that acquires information and applies it in the service of some goal, and what such an agent's environment must be like for the design to work" (AI, 7). This cognitive cue, tied to teleology, raises questions that, while not addressed in the introductory essay, concern the function of model and prototype, of that which is being tested, designed, and "invented" in view of a particular goal. In terms of its most expansive implications, the theme of information design opens a region wherein the distinction between discovery and the more instrumental epistemology of how something works is suspended. An invention no longer is figurable as a spontaneous eruption of substantial thingness but now gets serialized or parallel processed by various trials and tryouts. Although not foregrounded in terms of computational dependability, this more marginalized aspect of testability supports a structure given over to improvement and improvisation-indeed, an incomplete structure that, if not respectable, is rigorous but open-ended. The more subtle folds of testability, their tendency to collapse or open unexpected areas for

thought and experiment, are however left untouched in order, it would seem, to keep intact the phantasm of testing's groundedness and unquestioned solidity. In bringing forward such objections, I am not picking on a minor deflection or bizarre moment in a generally more reliable field: these disturbances are characteristic of the self-assured procedures of present-day inquiry and continue to call for further reflection.

b) In a noteworthy, if somewhat typical, discussion that includes theories of algorithms applicable to real-time behavior, a snag emerges under the aegis of the "planning problem." In this instance, AI is mustered to probe research methods and searches out the space of possible actions to compute some sequence of actions and decision theory. The problem deals with the fact that agents, "whether human or robots, are *resource* bounded: they are unable to form arbitrarily large computations in constant time" (AI, 7). In sum, the dilemma concerns the time-zone paradox of freezing the future in order to plan, in another register, the time for working through computations. The more complicated computations become, the more time it takes and the less we are in sync with the possibility of a grounded answer: "This is a problem because the more time spent on deliberations, the more chance there is that the world will change in important ways-ways that will undermine the very assumptions on which the deliberation is proceeding" (AI, 7). If anything, this dilemma indicates an acute time-bound paradox that undermines the conditions for thinking through a problem, or even for questioning its appropriateness for inquiry. The somewhat hidden opposition that begins to come clean in this line of argument entails the speed up of the present that runs up against the more lugubrious pace of "deliberation." The assumption, pitting the timing of the test versus the time of thinking, dominates a number of the problems that are focalized in AI considerations. The thriller dimension of current research, which, setting its timer, gives scientific inquiry the rush it apparently needs to set up for its goal, is very possibly based on the misguided notion that "the world will change in important ways." To offset the competitive quality of the research that is being clocked, more philosophy must be allowed to drift in, if only to demystify those ideologies of acceleration that relentlessly run down the slower-paced thinking and an ethics of hesitation.

Whether as origin or effect of temporal hysteria, newer technologies strain to beat the ontic clock. A problem besetting recent AI planning systems is that they have been designed "to construct plans prior to, and distinct from, their execution. It is recognized that the construction of plans takes time. However, these plans have been constructed for a set of future conditions that are known in advance and frozen" (AI, 8). The conditions for which a plan has been constructed, the so-called start state, must be known not to change prior to execution. There exists, then, at once a fear that future conditions will overtake the calculations made for them and that they consist of altogether knowable factors to be frozen in advance. A major tensional drama occurs in the noncoincidence of planning and its execution. Planning phases include such acts as modeling, testing, constructing prototypes, development. Regardless of whether the future is foreseeable or not, something has to be maintained as a stable factor: in these considerations stability is bestowed by the test. If the test cannot originate knowledge, it at least confirms that there is knowledge. However, even if a test, to fulfill its bald constative claims, assumes the function of providing definitive results or at least of confirming that cognition occurs, testing, for its part and imparting, is always temporally determined. Thus, the criterion of testability also inscribes the erasure of what is to be tested. Given the timed stretch between prototype and execution-one of many possible models-testing, in principle, can never catch up with itself in order to locate or stabilize itself in the cognitive domain for which it nonetheless serves as proof: another reason why tests have to be taken over and over again, if only to fill the fictional time of the absolute present, or of the experience of such a present.

In light of what has been said thus far, a related dimension of testing comes into the picture at this point. This development concerns the level of *responsiveness* that the test presupposes and for which it aims. Despite the radical provisionality defining its extended field, in some cases the test itself assumes the function of knowing the answer. While the test is a questioning act, and while it may prompt the necessity of counterexamples, it already contains and urges a sense of the correct way to answer its demand. It does not pose what we might call an innocent question, but has arranged things in such a way as to run ahead of itself to catch the answer for which it calls. To be sure, the test itself may be "surprised" by the way in which it is answered. Surprised by its own answer, of which it is henceforth dispossessed, the test attacks epistemological meaning with a kind of ontological fervor. The surprise passes for a shiver in ontology; something trembles in being.

To the extent that the test, according to its more constative pretexts, delivers results, corroborating or disconfirming what is thought to be known or even to exist, it can undermine anything that does not respond to its probative structure. The status of the thing tends to topple under the pressure of the test. Somewhat paradoxically, it is not clear even that something is known until there is a test for it. Consider the relevant passages in Douglas Hofstadter's well-known discussion of computer language, automatic chunking, and BlooP tests. BlooP defines predictably terminating calculations: "The standard name for *functions* which are BlooP-computable is *primitive recursive functions;* and the standard name for properties which can be detected by BlooP-tests is *primitive recursive predicates.*"⁴ It appears that, according to Hofstadter's view, extreme particularities do not correspond to testing but must be tapped for universal formulae. The test follows upon a sort of screening procedure that detects the universalizable trace:

Now the kinds of properties which can be detected by BlooP tests are widely varied.... The fact that, as of the present moment, we have no way of testing whether a number is wondrous or not need not disturb us too much, for it might merely mean that we are ignorant about wondrousness, and that with more digging around, we could discover a universal formula for the upper bound to the loop involved. Then a BlooP test for wondrousness could be written on the spot."⁵

In this context, it turns out that that test is not viewed so much as that which can prove more or less established hypotheses or provide new knowledge; it acts as an effect of knowledge that precomprehends itself-a certain type of metaphysically secured knowledge that needs only to *find* itself. In this rendering, the test eludes a broader definition in favor of probing and confirming its own foundation as presence, even if this should be inscribed in the form of latent concealment ("need not disturb us too much, for it might merely mean that we are ignorant"). The BlooP as metonymy of testing does not test anything outside the delimited field about which it already knows. This is not much different from saying that proofs are demonstrations within fixed systems of propositions. The type of logic deployed by Hofstadter appears to call for a test that ensures its own perpetuation without compromise or contamination from a designated outside. But what if the proofs were to explode the propositions? In other words, what if the test itself were to fail and significantly falter?

The normatively secured test does not originate knowledge but confirms what already exists as "knowable." Yet, as it sets its limits strictly, in accordance with specific codes or conventions, testing inevitably checks for the unknown loop that takes it beyond mere passing or failing, beyond determinacy or the result. The unpretended aim of a test, one could say here, is to meet its hidden blind spot, to fail. This is when it produces an effect of discovery, which occurs as accident, chance, confusion, or luck—something on the order of broad offtrack betting. We are given to understand that true failure is not merely of an instrumental nature, such as technical defect or mechanical failure. Generous failure, productive of disclosure, concerns a type of testing that probes more than the workability or conformity of its object to an already regulated norm—more than, say, a smog test (though, in keeping with essential failure, the politics of the test would no doubt be far more interesting if all cars were to be failed in service of another modeling of exhaust systems).

In a limited technological sense, the putative difference between passing or failing may be a trivial issue, as the recursive nature of the test determines its generation regardless of discrete results. It is in the nature of testing to be ongoing indefinitely, even when the simulation may pass into the referential world. As simulated and operational orders collapse into a single zone (where, for instance, an absolute distinction between real war and field test would be difficult to maintain over time), the more interesting questions of cadence, interruption, or reinterpretation emerge. Is it possible, in our era, to stop or even significantly to disrupt and reroute the significance of testing? In terms of political-pragmatic programs, we have seen the difficulties involved, for example, in banning nuclear tests. It is as if they have become naturalized, an unstoppable force. The successive attempts at banning tests require the intervention of signed treaties. We know from classical philosophy, which has not been contradicted on this point, from Kant ("A Sketch for Perpetual Peace") through Walter Benjamin ("Critique of Violence") and more contemporary observations, that treaties suspend violence only momentarily, artificially. The irony of Kant's unfinished sketch gratifies the allegory of an impossible peace. Because testing henceforth belongs to the question of violence-involving treaties, conventions, regulations, policing, ethical debate, considerations of eco-ontology, and the like-only with the help of a discussion of rhetorical codes strong enough to scan the paradoxical logic of testing can we begin to analyze the problem of its unstoppability, if indeed this is to be understood, today, as a problem.⁶

Does the test occupy a juridical or strictly legal space or does it produce a space that supplements these determinations—perhaps even supporting and altering them according to another logic? The task of reading the links between violence and testing, the legality and topology of the test site—its possible *anomy*, that is, the extralegal privilege of testing-requires us however to pass the test through the modalities of its undecidable bearings: it is necessary and possible to understand testing as good and evil, as situated beyond good and evil, if not as that which decisively directs the very determination of good and evil. A radical formulation of the questions at hand leads us to ask, Can there be any ascertainable good prior to the test? (Short of Platonic shredders, what allows us to know whether something is "good" if it has not been put to the test?) Or worse, still: Can there be a human being without a test? (For an analogy in fiction, one thinks of the endless battery of tests devised for determining the replicant/human difference in Blade Runner [1982]). If we were able to get through to the other side of these questions, beyond the ambivalence that the test appears at every juncture to restore, and supposing we decided that it would be best to end with the secret syndications of testing: Under what conditions would banning or disruption be at all possible?

We have noted how AI posits testability as ground. In addition, it appears to share with Kurt Gödel the optimism that testing will catch up with truth. In other words, AI does not reflect upon the value of the truth it posits, or upon the largely performative forces that fuel its assumption of truth. Gödel has argued that there are true statements of number theory that its methods of proof are too weak to demonstrate. His proof pertained to *any* axiomatic system purporting to achieve the aims that Alfred North Whitehead and Bertrand Russell, in their Principia Mathematica, had set for themselves. Gödel shows how statements of number theory, being also statements about statements of number theory, could each misdirect a proof. In sum, Gödel demonstrates that provability "is a weaker notion than truth."7 This is not the place to interrogate precisely how truth works in the coding scheme; nonetheless, it seems safe to say that Gödel rescues truth from limitative results of provability, keeping it intact and pinned to an idealized horizon of expectation.

Proofs ... Proofs ... Proofs ...

Prototype America

To the extent that the experimental disposition emerges from constant self-differentiation, can simulate itself and wears, as Nietzsche suggests, many masks, it unquestionably belongs to an experimental site that Nietzsche calls in a crucial moment of development "America." If I say "development," it is because Nietzsche for once offers thanks to Hegel for having introduced into science the decisive concept of development. The gratitude is shortlived: we learn quickly that Hegel "delayed atheism dangerously by persuading us of the divinity of existence where Schopenhauer's unconditional and honest atheism at least made the ungodliness of existence palpable and indisputable" (*GS*, 307). America becomes an experimental site because it is the place of acting and *role playing*—a concept developed by Nietzsche for America or by America for Nietzsche.

At this point or place Nietzsche links experimentation with the development of improv techniques. The principal axioms of the gay science are related to dimensions of exploration and discovery; discovery is not seen simply in terms of "invention" but, under certain conditions, as a way of discovering what was already there, inhabited, which is why Nietzsche sometimes takes recourse to the discovery of America—an event, an experiment, a unique stage for representing discovery without invention in conjunction with serious historical risk. If Mary Shelley had seen the discovery of America as an event that occurred too suddenly, without the stops and protections of gradual inquiry—in sum, as a world-historical shock of intrusive violence that disrupted all sorts of ecologies, material and immaterial, conscious and unconscious—Nietzsche studies the profound disruption to thought that the experimental theater of America directed.⁸

Taking off for America, he redefines the place of the experimenter, letting go of familiar mappings and manageable idioms. The experimenter must give up any secure anchoring in a homeland, allow herself to be directed by an accidental current rather than aiming for a preestablished goal. The accidental current becomes the groove for a voyage taken without helmsman, without any commanding officer or function, Nietzsche insists. As exemplary contingency plan, America allows for outstanding reinscriptions of fortuity. Its alliance with unprecedented applications of the inessential—the historical complicity with risk—gives everyone the hope at least of having an even chance. The fate of America, or this aspect of it, was written into its Constitution as a land of discovery. And now, to the accidental discovery of America, where Nietzsche goes on a job hunt.

There have been ages when men believed with rigid confidence, even with piety, in their predestination for precisely one particular occupation, "precisely this way of earning a living, and simply refused to acknowledge the element of accident, role, and caprice. With the help of this faith, classes, guilds and hereditary trade privileges managed to erect those monsters of social pyramids that distinguish the Middle Ages and to whose credit one can adduce at least one thing: durability (and duration is a first-rate value on earth)" (*GS*, 302). Uninterrogated durability and rigid social hierarchy will be thrown over by what Nietzsche calls "America":

But there are opposite ages, really democratic, where people give up this faith, and a certain cocky faith and opposite point of view advance more and more into the foreground—the Athenian faith that first becomes noticeable in the Periclean age, the faith of the Americans today that is more and more becoming the European faith as well: the individual becomes convinced that he can do just about everything and can manage any role, and everybody experiments with himself, improvises, makes new experiments, enjoys his experiments; and all nature ceases and becomes art. (*GS*, 302–3)

A disfiguring translation of the Renaissance man, the jack-ofall-trades is an American symptom rebounding to Europe, changing the configuration of the want ads that erase natural constraints. One is up for anything, open to the identity du jour, capable of ceaseless remakes and integral adjustment. The American athleticism of identity switching has marked politics everywhere, brushing against ideologies of authentic rootedness or natural entitlement. It also means that anyone can in principle try anything out, the bright flip side of which we count the art of improv and experimentation, including performance art and jazz. (Music was always with science on this point, from at least Bach's *Inventions* to synthesizers and the communities of their computerized beyond.) Nietzsche's focus rests on the individual's incredible conviction that he can manage any role. The refined profile for role management, by the way, Nietzsche locates in the Jewish people, who have had to play it as it comes, go with the flow, adjust and associate. The experimenter is at once the experimentee: there is little room here for securing the range of scientific or artistic distance, or, more precisely, he supplies just enough slack to let one try oneself out. Everyone turns himself into a test site, produces ever new experiments and, significantly, enjoys these experiments. This plasticity does not match the solemn lab for which Dr. Frankenstein becomes the paradigmatic director, weighted as he is with Germanic gravity and remorse over the meaning of his relentless experiments. Nonetheless, oppositions should not be held too rigidly, for Europe and America are

sharing needles on this one, contaminating one another according to the possibilities of new experimental *jouissance*. In the end Victor Frankenstein, too, was carried over the top by his brand of *jouissance*, by a level of desire punctuated by grim determination.

Clearly, there is a price to be paid by the experimental player. One cannot remain detached from the activity of intense experimentation but finds oneself subject to morphing: One grows into one's experimental role and becomes one's mask. America's increasing obsession with actors—now actors have political views has roots in Greece and can be connected in Nietzsche to his observations on nonsubstantial role playing:

After accepting this role faith-an artist's faith, if you will-the Greeks, as is well known, went step for step through a rather odd metamorphosis that does not merit imitation in all respects: They really became actors. . . . and whenever a human being begins to discover how he is playing a role and how he can be an actor, he becomes an actor. . . . It is thus that the maddest and most interesting ages of history always emerge, when the "actors," all kinds of actors, become the real masters. As this happens, another human type is disadvantaged more and more and finally made impossible; above all, the great "architects": The strength to build becomes paralyzed; the courage to make plans that encompass the distant future is discouraged; those with a genius for organization become scarce: who would still dare to undertake projects that would require thousands of years for their completion? For what is dying out is the fundamental faith that would enable us to calculate, to promise, to anticipate the future in plans of such scope, and to sacrifice the future to them-namely, the faith that man has value and meaning only insofar as he is a stone in a great edifice; and to that end he must be solid first of all, a "stone"-and above all not an actor! (GS, 303)

Nietzsche enters the zone where actors become the ruling part—"the real masters"—but unleashes the irony of mimetic dissuasion. This theater of politics and value-positing stunts should not necessarily be imitated, he warns. In this passage of paradoxical reversal, experimenting gradually becomes associated with America and the impending rule of actors. Philosophy comes to see experimenting in the negative light of project paralysis, inhibiting acts of promising, calculating, or anticipation—acts by which the future can be nailed down, as it were, and "sacrificed" to the performatives that bind it. The futural stone age has been compromised, however, by new human flora and fauna, which, Nietzsche asserts, could never have grown in more solid and limited ages. So the experimental disposition, cast in soft metaphors, waters down the solid reputation of the ages, showing the experimenter to be not quite solid as a rock but rather absorbed into a soft present that recedes into itself from distance or future. Nonetheless Nietzsche considers this age as one without limit—of unlimited finity; the age of "actors" encompasses the maddest and most interesting of possible ages. It is not clear how the loss of this hard-rock faith ought to be evaluated in the end, because Nietzsche elsewhere tends to emphasize the need for shedding such faith and, when taking on new forms spontaneously, he gets the green card and becomes somewhat of an American himself.

Nietzsche is well within his comfort zone when the personal technologies of shedding and softening take hold of existence, when brevity becomes the correct tact to measure out a given stage of life. He is attached only to brief habits, he writes, describing a fluidity that allows him to get to know many things and states:

I love brief habits and consider them an inestimable means for getting to know many things and states, down to the bottom of their sweetness and bitternesses. My nature is designed entirely for brief habits, even in the needs of my physical health and altogether as far as I can see at all-from the lowest to the highest. I always believe that here is something that will give me lasting satisfaction-brief habits, too, have this faith of passion, this faith in eternity-and that I am to be envied for having found and recognized it; and now it nourishes me at noon and in the evening and spreads a deep contentment all around itself and deep into me so that I desire nothing else, without having any need for comparisons, contempt or hatred. But one day its time is up; the good thing parts from me, not as something that has come to nauseate me but peacefully and sated with me as I am with it-as if we had reason to be grateful to each other as we shook hands to say farewell. Even then something new is waiting at the door, along with my faith-this indestructible fool and sage!-that this new discovery will be just right, and that this will be the last time. That is what happens to me with dishes, ideas, human beings, cities, poems, music, doctrines, ways of arranging the day, and life styles. (GS, 236-37)

Beyond stating the motif of farewell and Nietzschean gratitude, the passage inventories the things that offer themselves to experimentation, testing, and structural rearrangement, covering the span from dishes, cities, schedules, and music to Nietzsche's unquestionably Californian invention of lifestyle. The existential range of motion allows for time to press upon pleasure, to mark the end with a mastered violence. Nietzsche says and sees the day when, with a feeling of satiety and peacefulness, the time comes for good things to bid him farewell. This reciprocal scene of departure invites the relation to things to evade the punishing rhythm of violent and constant improvisation. Something stays with him—the brief habit does not overthrow a certain habitual groundedness that supports brevity and experimental essays. In fact the excess of habitlessness would destroy the thinker and send him out of America into Siberia. He admits, "[m]ost intolerable, to be sure, and the terrible par excellence would be for me a life entirely devoid of habits, a life that would demand perpetual improvisation. That would be my exile and my Siberia" (*GS*, 237). Carried to extremes, the homelessness of experimentation turns into unsettling exile into the horror of being—when it demands nonstop improv. Still, the opposite of horror is odious to Nietzsche, a kind of political noose around his delicate neck:

Enduring habits I hate. I feel as if a tyrant had come near me and as if the air I breathe had thickened when events take such a turn that it appears that they will inevitably give rise to enduring habits; for example, owing to an official position, constant association with the same people, a permanent domicile, or unique good health. Yes, at the very bottom of my soul I feel grateful to all my misery and bouts of sickness and everything about me that is imperfect, because this sort of thing leaves me with a hundred backdoors through which I can escape from enduring habits. (*GS*, 237)

The experimental disposition, then, has to dismantle its internal and material lab frequently to keep the punctual rhythm of the brief habit going—a philosophical policy susceptible of significant consequences. Nietzsche never places the experiment on the side of monumentality or reliable duration; it cannot be viewed as a project. Nor is he attached to a particular form of experiment this is not the scientist obsessed with an *idée fixe*—but one capable of uprooting and going, for better or worse, with the diversifying flow of ever new flora and fauna. This degree of openness, though it does have its limits and points of closure, necessarily invites ambivalence—those moments, for instance, when Nietzsche stalls, dreaming of immense edifices and the permanence promised by contracts written in stone.

Although he at every point invites precisely such a register of understanding, the Nietzschean ambivalence toward experimentation cannot be reduced to the personal whim or contingent caprice of Fred Nietzsche, even when he experiments on himself or writes in a letter to Peter Gast that the Gay Sci was the most *personal* among his books. What he means by "personal" has everything to do with the nature of scientificity that he expounds. In Nietzsche as in Goethe, scientists are at no point placed strictly or simply outside the field of experimentation; part of the thinking of personality, they cannot extricate themselves from the space of inquiry in the name of some mystified or transcendental project from which the personhood of the scientist can be dropped out or beamed up at will.⁹ The test site can always blow up in their faces or make ethical demands on them—for Nietzsche, this would remain a personal dilemma.

Notes

¹ Friedrich Nietzsche, "Morality as a Problem," in *The Gay Science: With a Prelude in Rhymes and an Appendix of Songs*, trans. Walter Kaufmann (New York: Vintage, 1974), 283–84, quotation on 283. *The Gay Science* is hereafter cited as *GS* in the text.

² Michel Foucault, "Nietzsche, Genealogy, History," in *Language, Counter-Mem*ory and Practice: Selected Essays and Interviews, ed. Donald F. Bouchard (Ithaca, NY: Cornell University Press, 1977), 139–64, quotations on 163.

³ Robert Cummins and John Pollock, eds., *Philosophy and AI: Essays at the Interface* (Cambridge, MA: MIT Press, 1991), 1; hereafter cited as *AI* in the text.

⁴ Douglas Hofstadter, Gödel, Escher, Bach: An Eternal Golden Braid (New York: Vintage, 1980), 414.

⁵ Ibid., 408.

⁶ I offer a reading of these works in conjunction with Derrida's discussion of "Force of Law" in "Activist Supplement: Papers on the Gulf War" (in *Finitude's Score: Essays for the End of the Millennium* [Lincoln: University of Nebraska Press, 1998], 293–304).

⁷ See the fairly straightforward discussion in Hofstadter, *Gödel, Escher, Bach* (18–19).

⁸ In *Frankenstein; or, the Modern Prometheus* (London, 1818), Mary Shelley figures the discovery of America that, when compared with the invention of the fiend figures, as the more grievous monstrosity. For other charges of monstrosity, see the close-range focus of Laurence Rickels on unstoppable growth spurts in *The Case of California* (Baltimore: Johns Hopkins University Press, 1991) and more recent texts on body building and politics (cf. Laurence A. Rickels, "Metropolis, California," *artUS*, no. 3 [2004]: 33–41).

⁹ The meaning of the personal trace in the logic of scientific discovery is a problem that has been tried by Derrida in his analysis, for instance, of Freud's place in the discovery of *fort/da*, as well as in the trajectories of Lacan's return to Freud, or Foucault's massive reading of desire and power. Derrida's relation to improvisation and invention is something that still needs to be understood scientifically, if one can still say so.