From:
Elizabeth Grosz
Architecture From the Outside:
Essays on Virtual and
Real Space Cambridge, Mass
MIT 2001

Philosophy should be an effort to go beyond the human state.

Henri Bergson,
The Creative Mind:
An Introduction to Metaphysics

Ten The Thing

Things

The thing goes by many names. Indeed the very label, "the thing," is only a recent incarnation of a series of terms which have an illustrious philosophical history: the object, matter, substance, the world, noumena, reality, appearance, and so on. In the period of the Enlightenment, from Descartes to Kant, the thing became that against which we measured ourselves and our limits, the mirror of what we are not. While rare, anomalous readings of the thing emerge in post-Kantian philosophy, it is primarily associated with inert materiality. Much more recently, since the cold war, it has been associated, through this alienation from the subject, with an animated and potentially malevolent materiality, a biological materiality that is or may be the result of our unknowing (usually atomic or nuclear) intervention into nature, the revenge of the blob, of protoplasm, of radiated existence, which imperils man. Nevertheless, through these various permutations, the thing remains identified with immanence, with what we are capable of overcoming, albeit with the input of a technological supersession of the body and its reemergence in virtual form.[1] But instead of outlining *this* history, paying homage to the great thinkers of the thing, and particularly to the scientists who devoted their intellectual labors to unraveling its properties and deciphering the laws regulating its relations (the thing has

become the property of the intellect and of science), I am seeking an altogether different lineage, one in which the thing is not conceived as the other, or binary double, of the subject, the self, embodiment, or consciousness, but as its condition and the resource for the subject's being and enduring. Instead of turning to Descartes or his hero, Newton, to understand things and the laws governing them, we must instead begin with Darwin and his understanding of the thing—the dynamism of the active world of natural selection—as that which provides the obstacle, the question, the means, by which life itself grows, develops, undergoes evolution and change, becomes other than what it once was. The thing is the provocation of the nonliving, the half-living, or that which has no life, to the living, to the potential of and for life.

The thing in itself is not, as Kant suggested, noumenal, that which lies behind appearances and which can never appear as such, that which we cannot know or perceive. Rather, if we follow Darwin, the thing is the real that we both find and make. The thing has a history: it is not simply a passive inertia against which we measure our own activity. It has a "life" of its own, characteristics of its own, which we must incorporate into our activities in order to be effective, rather than simply understand, regulate, and neutralize from the outside. We need to accommodate things more than they accommodate us. Life is the growing accommodation of matter, the adaptation of the needs of life to the exigencies of matter. It is matter, the thing, that produces life; it is matter, the thing, which sustains and provides life with its biological organization and orientation; and it is matter, the thing, that requires life to overcome itself, to evolve, to become more. We find the thing in the world as our resource for making things, and in the process, for leaving our trace on things. The thing is the resource for both subjects and technology.

This Darwinian inauguration of the active thing marks the beginning of a checkered, even mongrel, philosophical history, a history that culminates in a self-consciously evolutionary orientation: the inauguration of philosophical pragmatism that meanders from Darwin, through Nietzsche, to the work of Charles Sanders Peirce, William James, Henri Bergson, and eventually, through various lines of descent, into the diverging positions of Richard Rorty, on the one hand, and Gilles Deleuze on the other. These are all, in their disparate ways, pragmatist philosophers who put the questions of action, practice, and movement at the center of ontology. What these disparate thinkers share in common is little else but an understanding of the *thing as question*, as provocation, incitement, or enigma.[2] The thing, matter already configured, generates invention, the assessment of means and ends, and thus enables practice. The thing poses questions to us, questions about our needs and desires, questions above all of action: the thing is our provocation to action and is itself the result of our action. But more significantly, while the thing functions as fundamental provocation—as that which, in the virtuality of the past and the immediacy of the present cannot be ignored—it also functions as a *promise*, as that which, in the future, in retrospect, yields a destination or effect, another thing. The thing is the precondition of the living and the human, their means of survival, and the consequence or product of life and its practical needs. The thing is the point of intersection of space and time, the locus of the temporal narrowing and spatial localization that constitutes specificity or singularity.

Space and Time

The thing is born in time as well as space. It inscribes a specific duration and concrete boundaries within the broad outlines of temporal succession or flow and spatial

mapping. It emerges out of and as substance. It is the coming-into-existence of a prior substance or thing, in a new time, producing beneath its processes of production a new space and a coherent entity. The thing and the space it inscribes and produces are inaugurated at the same moment, the moment that movement is arrested, frozen, or dissected to reveal its momentary aspects, the moment that the thing and the space that surrounds it are differentiated conceptually or perceptually. The moment that movement must be reflected upon or analyzed, it yields objects and their states, distinct, localized, mappable, repeatable in principle, objects and states that become the object of measurement and containment. The depositing of movement, its divisibility, and its capacity to be seen statically are the mutual conditions of the thing and of space. The thing is positioned or located in space only because time is implicated, only because the thing is the dramatic slowing down of the movements, the atomic and molecular vibrations, that frame, contextualize, and merge with and as the thing.

The thing is the transmutation, the conversion of two into one: the conversion of the previous thing, plus the energy invested in the process of its production as a different thing, a unity or a one. The making of the thing, the thing in the process of its production as a thing, is that immeasurable process that the thing must belie and disavow to be a thing. Both James and Bergson agree that, in a certain sense, although the world exists independent of us—although there is a real that remains even when the human disappears—things as such do not exist in the real. The thing is a certain carving out of the real, the (artificial or arbitrary) division of the real into entities, bounded and contained systems, that in fact only exist as open systems within the real. James provides one of the classical pragmatic descriptions of the thing:

> What shall we call a *thing* anyhow? It seems quite arbitrary, for we carve out everything, just as we carve out constellations, to suit our human purposes. . . . The permanently real things for you [James's live audience] are your individual persons. To an anatomist, again, those persons are but organisms, and the real things are the organs. Not the organs, so much as their constituent cells, say the histologists; not the cells, but their molecules, say in turn, the chemists. . . . We break the flux of sensible reality into things, then, at our will.[3]

The thing is what we make of the world rather than simply what we find in the world, the way we are able to manage and regulate it according to our needs and purposes (even if not, as James suggests above, at will or consciously. We cannot but perceive the world in terms of objects. We do not do so as a matter of will). The thing is an outlined imposition we make on specific regions of the world so that these regions become comprehensible and facilitate our purposes and projects, even while limiting and localizing them. Things are our way of dealing with a world in which we are enmeshed rather than over which we have dominion. The thing is the compromise between the world as it is in its teeming and interminable multiplicity—a flux as James calls it, a continuum in Lacan's terms, or waves of interpenetrating vibrations in Bergson's understanding—and the world as we need it to be or would like it to be: open, amenable to intention and purpose, flexible, pliable, manipulable, passive. It is a compromise between mind and matter, the point of their crossing one into the other. It is our way of dealing with the plethora of sensations, vibrations, movements, and intensities that constitute both our world and ourselves, a practical exigency, indeed perhaps only one mode, not a necessary condition, of our acting in the world. James claims that we have the choice of seeing the world as objects: however, we do not. Just as Kant

imposed space and time as a priori intuitions, which we have no choice but to invoke and utilize, so too we must regard objects, distinguished from other objects and from a background, as necessary, if limited, conditions under which we act in the world. Space, time, and things are conceptually connected: space and time are understood to frame and contextualize the thing; they serve as its background:

> Cosmic space and cosmic time, so far from being the intuitions that Kant said they were, are constructions as patently artificial as any that science can show. The great majority of the human race never use these notions, but live in the plural times and spaces, interpenetrant and *durcheinander.*
>
> Permanent "things" again: the "same" thing and its various "appearances" and "alterations"; the different "kinds" of things; with the "kind" used finally as a "predicate" of which the thing remains the "subject"—what a straightening of the tangle of our experience's immediate flux and sensible variety does this list of terms suggest![4]

Bergson elaborates on James's position: the world as it is in its swarming complexity cannot be an object of intelligence, for it is the function of intelligence to facilitate action and practice. The possibility of action requires that objects and their relations remain as simplified as possible, as coagulated, unified, and massive as they can be so that their contours or outlines, their surfaces, most readily promote indeterminate action. We cannot but reduce this multiplicity to the order of things and states if we are to act upon and with them, and if we are to live among things and use them for our purposes. Our intellectual and perceptual faculties function most ably when dealing with solids, with states, with things, though we find ourselves at home most readily, unconsciously or intuitively, with processes and movements:

> Reality is mobile. There do not exist *things* made, but only things in the making, not *states* that remain fixed, but only states in process of change. Rest is never anything but apparent, or rather, relative. . . . *All reality is, therefore, tendency, if we agree to call tendency a nascent change of direction.*
>
> Our mind, which seeks solid bases of operation, has as its principal function, in the ordinary course of life, to imagine *states* and *things.* Now and then it takes quasi-instantaneous views of the undivided mobility of the real. It thus obtains *sensations* and *ideas.* By that means it substitutes fixed points which mark a direction of change and tendency. This substitution is necessary to common sense, to language, to practical life, and even . . . to positive science. *Our intelligence, when it follows its natural inclination, proceeds by solid perceptions on the one hand, and by stable conceptions on the other.*[5]

We stabilize masses, particles large and small, out of vibrations, waves, intensities, so we can act upon and within them, rendering the mobile and the multiple provisionally unified and singular, framing the real through things as objects for us. We actively produce objects in the world, and in so doing, we make the world amenable to our actions but also render ourselves vulnerable to their reactions. This active making is part of our engagement in the world, the directive force of our perceptual and motor relations within the world. Our perception carves up the world and divides it into things. These things themselves are divisible, amenable to calculation and further subdivision; they are the result of a sort of subtraction: perception, intellect, cognition, and action reduce and refine the object, highlighting and isolating that which is of interest

or potential relevance to our future action. To Bergson, the object is that cutting of the world that enables me to see how it meets my needs and interests: "The objects which surround my body reflect its possible action upon them."[6]

> The separation between a thing and its environment cannot be absolutely definite and clear-cut; there is a passage by insensible gradations from the one to the other: the close solidarity which binds all the objects of the material universe, the perpetuality of their reciprocal actions and reactions, is sufficient to prove that they have not the precise limits which we attribute to them. Our perception outlines, so to speak, the form of their nucleus; it terminates them at the point where our possible action upon them ceases, where, consequently, they cease to interest our needs. Such is the primary and the most apparent operation of the perceiving mind: it marks out divisions in the continuity of the extended, simply following the suggestions of our requirements and the needs of practical life.[7]

This cutting of the world, this whittling down of the plethora of the world's interpenetrating qualities, those "pervading concrete extensity, *modifications*, *perturbations*, changes of *tension* or of *energy* and nothing else"[8] into objects amenable to our action is fundamentally a *constructive* process: we make the world of objects as an activity we undertake by living with and assimilating objects. We make objects in order to live in the world. Or, in another, Nietzschean sense, we must live in the world artistically, not as *homo sapiens* but as *homo faber*:

> Let us start, then, from action, and lay down that the intellect aims, first of all, at constructing. This fabrication is exercised exclusively on inert matter, in this sense, that even if it makes use of organized material, it treats it as inert, without troubling about the life which animated it. And of inert matter itself, fabrication deals only with the solid; the rest escapes by its very fluidity. If, therefore, the tendency of the intellect is to fabricate, we may expect to find that whatever is fluid in the real will escape it in part, and whatever is life in the living will escape it altogether. *Our intelligence, as it leaves the hands of nature, has for its chief object the unorganized solid.*[9]

We cannot help but view the world in terms of solids, as things. But we leave behind something untapped of the fluidity of the world, the movements, vibrations, transformations that occur below the threshold of perception and calculation and outside the relevance of our practical concerns. Bergson suggests that we have other access to this rich profusion of vibrations that underlie the solidity of things.[10] Bergson describes these nonintellectual or extra-intellectual impulses as instincts and intuitions, and while they are no more able to perceive the plethora of vibrations and processes that constitute the real, they are able to discern the interconnections, rather than the separations between things, to develop another perspective or interest in the division and production of the real. Intuition is our nonpragmatic, noneffective, nonexpedient relation to the world, the capacity we have to live in the world in excess of our needs, and in excess of the self-presentation or immanence of materiality, to collapse ourselves, as things, back into the world. Our "artisticness," as Nietzsche puts it, our creativity, in Bergsonian terms, consists in nothing else than the continuous experimentation with the world of things to produce new things from the fluidity or flux that eludes everyday need, or use value.

Technology and the Experimental

Technology, as human invention, is clearly one of the realms of "things" produced by and as the result of the

provocation of things-as-the-world. While things produce and are what is produced by the activities of life, things themselves are the object and project not only of the living but also of the technological. Technology is also a metaproduction: the production of things that produce things, a second-order production. Technology is in a sense the inevitable result of the encounter between life and matter, life and things, the consequence of the living's capacity to utilize the nonliving (and the living) *prosthetically*. Technology has existed as long as the human has; the primates' capacity for the use of found objects prefigures both the human and the technological. From the moment the human appears as such, it appears alongside of both artifacts and technologies, poesis and techne, which are the human's modes of evolutionary fitness, the compensations for its relative bodily vulnerability. According to Bergson, it is the propensity of instinct (in animals) and intelligence (in higher primates and man) to direct themselves to things, and thus to the making of things, and it is the status and nature of the instruments to which life is directed that distinguish the instincts from intelligence, yet connect them in a developmental continuum, with intelligence functioning as an elaboration of and deviation from instinct.[11]

Animals invent. They have instruments, which include their own body parts, as well as external objects. Humans produce technologies and especially, Bergson suggests, instruments that are detached and different from their own bodies, instruments that the body must learn to accommodate, instruments that transform both the thingness of things, and the body itself:

> Invention becomes complete when it is materialized in a manufactured instrument. Towards that achievement the intelligence of animals tends as towards an ideal. . . . As regards human intelligence, it has not been sufficiently noted that mechanical invention has been from the first its essential feature, that even to-day our social life gravitates around the manufacture and use of artificial instruments, that the inventions which strew the road of progress have also traced its direction. . . . In short, *intelligence, considered in what seems to be its original feature, is the faculty of manufacturing artificial objects, especially tools to make tools, and of indefinitely varying the manufacture.*[12]

Technologies involve the invention of things that make things, of second-order things. It is not that technologies mediate between the human and the natural—for that is to construe technology as somehow outside either the natural or the human (which today is precisely its misrepresented place) instead of seeing it as the indefinite extension of both the human and the natural and as their point of overlap, the point of the conversion of the one into the other, the tendency of nature to culture, and the cleaving of culture to the stuff of nature. Rather, the technological is the cultural construction of the thing that controls and regulates other things: the correlate of the natural thing. Pragmatism entails a recognition that the technological is and always has been the condition of human action, as necessary for us as things themselves, the cultural correlate of the thing, which is itself the human or living correlate of the world.

As Bergson acknowledges, while it is clumsy and cumbersome relative to the instrumentality our bodies provide us, technological invention does not succumb to a preexistent function. Although technology is in a sense made by us and for our purposes, it also performs a transformation on us: it increasingly facilitates not so much better action but wider possibilities of acting, more action. Technology is the great aid to action, for it facilitates, requires, and generates intelligence, which in turn radically

multiplies our possibilities of action, our instrumental and practical relation with the world: "The essential function of intelligence is . . . to see the way out of a difficulty in any circumstances whatever, to find what is most suitable, what answers best the question asked. Hence it bears essentially on the relations between a given situation and the means of utilizing it."[13] In an extraordinary passage, Bergson claims that the intellect transforms matter into things, which render them as prostheses, artificial organs, and, in a surprising reversal, simultaneously humanizes or *orders* nature, appends itself as a kind of prosthesis to inorganic matter itself, to function as its rational or conceptual supplement, its conscious rendering. Matter and life become reflections, through the ordering the intellect makes of the world. Things become the measure of life's action upon them, things become "standing reserve," life itself becomes extended through things:

> All the elementary forces of the intellect tend to transform matter into an instrument of action, that is, in the etymological sense of the word, into an *organ*. Life, not content with producing organisms, would fain give them as an appendage inorganic matter itself, converted into an immense organ by the industry of the living being. Such is the initial task it assigns to intelligence. That is why the intellect always behaves as if it were fascinated by the contemplation of inert matter. It is life looking outward, adopting the ways of unorganized nature in principle, in order to direct them in fact.[14]

Inorganic matter, transformed into an immense organ, a prosthesis, is perhaps the primordial or elementary definition of architecture itself, which is, in a sense, the first prosthesis, the first instrumental use of intelligence to meld the world into things, through a certain primitive technicity, to fit the needs of the living. The inorganic becomes the mirror for the possible action of the living, the armature and architecture necessary for the survival and evolution of the living. Making, acting, functioning in the world, making oneself as one makes things—all these processes rely on and produce things as the correlate of the intellect, and leave behind the real out of which they were drawn and simplified.

Architecture and Making

What is left out in this process of making/reflecting is all that it is in matter, all that is outside the thing and outside technology: the flux of the real,[15] duration, vibration, contractions, and dilations, the multiplicity of the real, all that is not contained by the thing or by intellectual categories. The uncontained, the outside of matter, of things, of that which is not pragmatically available for use, is the object of different actions than that of intelligence and the technological. This outside, though, is not noumenal, outside all possible experience, but phenomenal, contained within it. It is simply that which is beyond the calculable, the framed or contained. It is the outside that architecture requires but cannot contain. Bergson understands this outside in a number of ways: as the real in its totality, as mobility, as movement, flux, duration, the virtual, the continuity which places the human within and as the material. What is now in question is the making of things, and that from which things are made, rather than the things made. This is what the rigorous process of intuition draws us toward, not things themselves so much as the teeming, suffuse network within which things are formed and outlined, the flux of the real.

This teeming flux of the real—"that continuity of becoming which is reality itself,"[16] the integration and unification of the most minute relations of matter so that they exist only by touching and interpenetrating, the flow and mutual investment of material relations into each other—must be symbolized, reduced to states, things, and numeration in order to facilitate practical action. This is not an

error that we commit, a fault to be unlearned, but a condition of our continuing survival in the world. We could not function within this teeming multiplicity without some ability to skeletalize it, to diagram or simplify it. Yet this reduction and division occur only at a cost, which is the failure or inability of our scientific, representational, and linguistic systems to acknowledge the in-between of things, the plural interconnections that cannot be utilized or contained within and by things but that makes them possible. Things are solids, more and more minute in their constitution, as physics itself elaborates more and more minute fundamental particles:

> Our intelligence is the prolongation of our senses. Before we speculate we must live, and life demands that we make use of matter, either with our organs, which are natural tools, or with tools, properly so-called, which are artificial organs. Long before there was a philosophy and a science, the role of intelligence was already that of manufacturing instruments and guiding the actions of our body on surrounding bodies. Science has pushed this labor of intelligence much further, but has not changed its direction. It aims above all at making us masters of matter.[17]

While the intellect masters that in the world which we need for our purposes, it is fundamentally incapable of understanding what in the world, in objects, and in us, is fluid, innumerable, outside calculation.[18] The limit of the intellect is the limit of the technical and the technological. The intellect functions to dissect, divide, atomize: contemporary binarization and digitalization are simply the current versions of this tendency to the clear-cut, the unambiguous, the oppositional or binary impulses of the intellect, which are bound by the impetus to (eventual or possible) actions. The technological, including and especially contemporary digital technologies, carries within it

both the intellectual impulse to divide relations into solids and entities, objects or things, ones and zeros, and the living impulse to render the world practically amenable. Digitization translates, retranscribes, and circumscribes the fluidity and flux by decomposing the analog or the continuous—currents—into elements, packages, or units, represented by the binary code, and then recomposing them through addition: analysis then synthesis. But these processes of recomposition lose something in the process, although they reproduce themselves perfectly. The sweep and spontaneity of the curve, represented only through the aid of smaller and smaller grids, or the musical performance represented only through the discrete elements of the score, represent a diminution of the fullness of the real; the analog continuum is broken down and simplified in digitization.[19] What is lost in the process of digitization, in the scientific push to analysis or decomposition, is precisely the continuity, the force, that binds together the real as complexity and entwinement:

> Suppose our eyes [were] made [so] that they cannot help seeing in the work of the master [painter] a mosaic effect. Or suppose our intellect [were] so made that it cannot explain the appearance of the figure on the canvas except as a work of mosaic. We should then be able to speak simply of a collection of little squares. . . . In neither case should we have got at the real process, for there are no squares brought together. It is the picture, i.e., the simple act, projected on the canvas, which, by the mere fact of entering our perception, is *de*composed before our eyes into thousands and thousands of little squares which present, as *re*composed, a wonderful arrangement.[20]

This is a prescient image of digitization: the recomposition of the whole through its decomposition into pixel-like units, the one serving as the representation of

the other. The curve, the continuous stroke, the single movement of an arm, is certainly able to be decomposed into as many stops or breaks as one chooses: "A very small element of a curve is very near being a straight line. And the smaller it is, the nearer. In the limit, it may be termed a part of the curve or a part of the straight line, as you please, for in each of its points a curve coincides with its tangent."[21] But something of the curve or movement is lost when it is recomposed of its linear elements or grids, when the parts are added together—the simplicity and unity, the nondecomposable quality, disappears, to be replaced by immense complexity, that is, the duration of the movement disappears into its reconfiguration as measurable and reconfigurable space, object, or movement.

The thing and the body are correlates: both are artificial or conventional, pragmatic conceptions, cuttings, disconnections, that create a unity, continuity, and cohesion out of the plethora of interconnections that constitute the world. They mirror each other: the stability of one, the thing, is the guarantee of the stability and ongoing existence or viability of the other, the body. The thing is "made" for the body, made as manipulable for the body's needs. And the body is conceived on the model of the thing, equally knowable and manipulable by another body. This chain of connections is mutually confirming. The thing is the life of the body, and the body is that which unexpectedly occurs to things. Technology is that which ensures and continually refines the ongoing negotiations between bodies and things, the deepening investment of the one, the body, in the other, the thing.

Technology is not the supersession of the thing but its ever more entrenched functioning. The thing pervades technology, which is its extension, and also extends the human into the material. The task before us is not simply to make things or to resolve relations into things, more and more minutely framed and microscopically understood; rather, it may be to liberate matter from the constraint, the practicality, the utility of the thing, to orient technology not so much to knowing and mediating as to experience and the rich indeterminacy of duration. Instead of merely understanding the thing and the technologies it induces through intellect, perhaps we can also develop an acquaintance with things through intuition, that Bergsonian internal and intimate apprehension of the unique particularity of things, their constitutive interconnections, and the time within which things exist.[22]

The issue is not, of course, to abandon or even necessarily to criticize technologies, architecture, or the pragmatics of the thing, but rather, with Bergson, to understand both their limits and their residues. Perception, intellection, the thing, and the technologies they spawn proceed along the lines of practical action, and these require a certain primacy in day-to-day life. But they leave something out: the untapped, nonpractical, nonuseful, nonhuman, or extra-human continuity that is the object of intuition, of empirical attunement without means or ends.

One of the questions ahead of us now is this: What are the conditions of digitization and binarization? Can we produce technologies of other kinds? Is technology inherently simplification and reduction of the real? What in us is being extended and prosthetically rendered in technological development? Can other vectors be extended instead? What might a technology of processes, of intuition rather than things and practice, look like?

Ten The Thing

This essay will appear in Cynthia C. Davidson, ed., *Anything* (Cambridge: MIT Press, forthcoming).

1. See, for example, Hanna Fenichel Pitkin's curiously titled *The Attack of the Blob: Hannah Arendt's Concept of the Social* (Chicago: University of Chicago Press, 1998).

2. As William James implies in his discussion of the thing, or object, the object is that which has effects, directly or indirectly, on our perceptual responses and motor behavior. The object is the ongoing possibility of perception and action, the virtual trigger for responsiveness: "To attain perfect clearness in our thoughts of an object, then, we need only consider what conceivable effects of a practical kind the object may involve—what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects, whether immediate or remote, is then for us the whole of our conception of the object, so far as that conception has positive significance at all." William James, "What Pragmatism Means," in *Pragmatism and Four Essays from The Meaning of Truth* (Cleveland: Meridian Books, 1970), 43.

3. William James, "Pragmatism and Humanism," in ibid., 165.

4. William James, "Pragmatism and Common Sense," in ibid., 118–119.

5. Henri Bergson, *The Creative Mind: An Introduction to Metaphysics*, trans. Mabell L. Andison (New York: Citadel Press, 1992), 223.

6. Henri Bergson, *Matter and Memory*, trans. N. M. Paul and W. S. Palmer (New York: Zone Books, 1988), 21.

7. Ibid., 209–210.

8. Ibid., 201.

9. Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Random House, 1944), 153.

10. Indeed, Bergson's discussion of William James's pragmatism in *The Creative Mind* (see "On the Pragmatism of William James")

indicates that James's notion of truth is itself an acknowledgment of the limit of knowledge rather than its pervasiveness:

> The definition that James gives to truth, therefore, is an integral part of his conception of reality. If reality is not that economic and systematic universe our logic likes to imagine, if it is not sustained by a framework of intellectuality, intellectual truth is a human invention whose effect is to utilize reality rather than to enable us to penetrate it. And if reality does not form a single whole, if it is multiple and mobile, made up of cross-currents, truth which arises from contact with one of these currents,—truth felt before being conceived,—is more capable of seizing and storing up reality than truth merely thought. (259)

11. Bergson suggests that instinct finds a kind of technology ready at hand in the body and its organs, in found objects whose use is instinctively dictated, and in the differential dispersal of instinctual capacities in social animals that are highly stratified, as many insects are. Intelligence, on the other hand, invents and makes technology, but it also diverts natural objects into technological products through their unexpected and innovative use:

> Instinct perfected is a faculty of using and even of constructing organizing instruments; intelligence perfected is the faculty of making and using unorganized instruments.
>
> The advantages and drawbacks of these two modes of activity are obvious. Instinct finds the appropriate instrument at hand: this instrument, which makes and repairs itself, which presents, like all the works of nature, an infinite complexity of detail combined with a marvelous simplicity of function, does at once, when required, what it is called upon to do, without difficulty and with a perfection that is often wonderful. In return, it retains an almost invariable structure, since a modification of it involves a modification of the species. . . . The instrument constructed intelligently, on the contrary, is an imperfect instrument. It costs an effort. It is generally troublesome to handle. But, as it is made of unorganized matter, it can take any form whatsoever, serve any purpose, free the living being from every new difficulty that arises and bestow on it an unlimited number of powers. Whilst it is inferior to the natural instrument for the satisfaction of immediate wants, its advantage over it is greater, the less urgent the need. Above all, it reacts on the nature of the being that constructs it; for in calling on him to exercise a new function, it confers on him, so to speak, a richer organization, being an artificial organ by which the natural organism is extended. For every need that it satisfies, it creates a new need; and so, instead of closing, like instinct, the round of action within which the animal tends to move automatically, it lays open to activity an unlimited field into which it is driven further and further, and made more and more free.

Bergson, *Creative Evolution*, 140–141.

12. Ibid., 138–139 (emphasis in original).

13. Ibid., 150–151.

14. Ibid., 161.

15. Ibid., 250.

16. Bergson, *Matter and Memory*, 139.

17. Bergson, *The Creative Mind*, 43.

18. Bergson writes:

> We shall never explain by means of particles, whatever these may be, the simple properties of matter. . . . This is precisely the object of chemistry. It studies *bodies* rather than *matter*; and so we understand why it stops at the atom, which is still endowed with the general properties of matter. But the materiality of the atom dissolves more and more under the eyes of the physicist. We have no reason, for instance, for representing the atom to ourselves as a solid, rather than as a liquid or gaseous, nor for picturing the reciprocal action of atoms as shocks rather than in any other way. Why do we think of a solid atom, and why do we think of shocks? Because solids, being the bodies on which we clearly have the most hold, are those which interest us most in our relations with the external world, and because contact is the only

> means which appears to be at our disposal in order to make our body act upon other bodies. But very simple experiments show that there is never true contact between two neighboring bodies, and besides, solidity is far from being an absolutely defined state of matter. Solidity and shock borrow, then, their apparent clearness from the habits and necessities of practical life.

Bergson, *Matter and Memory*, 199.

19. On the distinction between the analog and the digital, see an early piece by Anthony Wilden, "Analog and Digital Communication: On Negation, Signification, and Meaning," in his *System and Structure: Essays on Communication and Exchange* (London: Tavistock, 1972).

20. Bergson, *Creative Evolution*, 90.

21. Ibid., 32.

22. Although it is commonly assumed that intuition is some vague feeling or sensibility, for Bergson it is a quite precise mode that refuses or precedes symbolization and representation: "We call intuition here the sympathy by which one is transported into the interior of an object in order to coincide with what there is unique and consequently inexpressible in it" (*The Creative Mind*, 190). Instead of a mere sympathy or identification, which is nothing but a psychologization or subjectivization of knowledge, Bergson wants to link intuition to an understanding of the absolute. What the intellect provides is a relative knowledge, a knowledge of things from a distance and thus from a perspective mediated by symbols, representations, and measurements, while intuition is what can provide an absolute analysis, which means one that is both internal and simple. This absolute is not understood in terms of an eternal or unchanging essence, but is rather, from the outside, a complex interplay of multiple forces and factors that, from the inside, resolves itself into a simple unity: "Seen from within, an absolute is then a simple thing; but considered from without, that is to say relative to something else, it becomes, with relation to those signs which express it, the piece of gold for which one can never make up the change" (ibid.).

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