

Toward the 22nd-Century World Philosophy: Philosophy as a Research Program

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1 Philosophy's Confusion

The Emergence of a New Reality

There was a time when the bounds of reality were pre-established. During the period that Foucault distinguished from the modern era and termed “the Classical Age,” the contours of the world had been largely captured on world maps and opportunities to encounter the unknown world had gradually disappeared. Natural theology, based on the pre-established concept of a “mechanistic world,” holds that, once brought into existence, the universe is governed by necessity. In the world of necessity, first crafted as a theological creation, theology and mechanics (science) coexisted effortlessly in their different roles. Under this construction, religion and science coexisted complementing one another. Since classical mechanics has no mechanism to conceive new realities, the bounds of reality became fixed. At this stage, reality and fiction and reality and the imaginary could be clearly differentiated. Fiction was nothing more than the opposite of reality or something that was extra distinguishable from it. Fiction could serve as pastime or entertainment, but could go no further.

The reorganization of knowledge that took place in the late 18th century and early 19th century brought about a change in the bounds of “reality.” Since then, new realities have been emerging without cease. Foucault’s *The Order of Things* presented a new horizon of knowledge wrought by parallel developments in biology, economics, and linguistics. It is difficult to exhaustively unpack what really happened in these fields. For example, the term “biology” itself was coined during this period, and numerous scientists began to use it almost simultaneously. Prior to this, the natural world had been divided into the kingdoms of minerals, plants, and animals, a division that had been maintained for the 2,300 years since its Aristotelian conception. Concurrently, the mechanisms by which individual organisms were established as such—whether this involved relations between organs or maintenance of functionality—shifted to become peculiar to the individual. When the relations such as the representatives of functionality were generalized, these became the factors that determined a species. Each individual defined itself rather than in accordance with standards assigned from the outside. Thus, nothing in a self-defining system can be externally predetermined, be it in terms of origins or goals toward which the system should move.

Economics, meanwhile, emphasized the search for the value itself from the descriptions of objects (assets). The characteristics of objects were exhaustively listed, one by one, and there followed an inquiry into how value comes into being and how it can be produced. In linguistics, the nouns that

had been the chief subject of examination gave way to verbs and adjectives. These developments provide a clear picture of the change from 18th-century natural history to mechanisms of knowledge in the 19th century and beyond and with knowledge losing its external supports and itself becoming an object undergoing a process of the production.

Self-defining systems thus became decentralized and ever open to the possibilities of the arrival of new individuals. With self-defining systems themselves becoming capable of continued change, the bounds of reality began to be continually updated. Within this continually changing reality, the word “human” began to take on new meaning and came to relate, in every setting, to the boundaries of reality and the scope of its possibilities. The “human” was an entity to which God had become purely external, created in an era with neither point of departure nor point of arrival, the last “stronghold of reality” set up as a kind of fiction.

Among the shifts of this period came the creation of major and multi-faceted “virtual realities.” The greatest among these was “the theory of evolution.” Cuvier boasted that he could draw the full profile of an animal from the observation of but one of its bones, producing pictures of creatures that seemed unlikely to exist or to have existed, whichever way we look at them.

The logical framework for the theory of evolution comes from the “phylogenetic tree,” an all-encompassing schema and structure of evolution. The mechanisms of evolution involve “the law of use and disuse,” “natural selection,” and “genetic mutation.” While Lamarck and Haeckel drew another detailed phylogenetic tree that positioned living creatures in lines of succession, *homo sapiens* was placed at the apex of both. As evolutionary history extended, the “human” became positioned at the apex of the entire biological system.

“Humanity,” at the apex of the phylogenetic tree, was therefore able to experience a certain stability for some time. This stability was systematically maintained. For example, it became clear in the field of ecology that each living creature has its own particular Umwelt, after von Uexküll. Ticks have their own world peculiar to ticks; flies a world unique to flies, and so on. Yet, it does not necessarily follow that the unique worlds of ticks and flies form multiple counterbalanced and disparate worlds. These unique worlds are in fact subtracted from the world perceived by humans positioned as substantially lacking in reality. This is one reason for the “human” being forever the “stronghold of reality,” itself a concurrent structural guarantee.

However, a “conflict of interest” penetrated the framework of the naturally arising argument that the “human” is the “stronghold of reality.” Adopting this assertion that the “human” is the “stronghold of reality” led to a conflict of interest in that this served naturally to the benefit of humanity. I believe I can hear the immediate outcry that, because humanity was the arbiter of reality, it is inevitable that humanity’s interests were included in that reality. This is an “epistemological conflict of interest.” All offshoots of Kantian theory feature this assertion.

I seem to hear, too, the claim that nothing can be perceived beyond the world viewed by humans. This is a “dialectic tyranny” that hides behind the human frontier mind of “human localism.” The reasons for this frontier lie in a logic wherein it is systematically guaranteed and all other possibilities is closed. Yet, both these factors run the risk of collapsing at the slightest provocation. Artificial Intelligence (AI) runs a completely different kind of calculation and carries a high probability of rendering a reality that has previously been invisible to humans. When this happens, it is highly likely that this reality will be significantly different from that conceived by humans.

Technological evolution, including AI, is beginning to promulgate the idea that the very “human”

who was positioned at that apex might be only a “virtual reality.” This moves beyond the much-revisited science fiction scenario in which the flesh and blood human is divested of his job and his position at the apex by AI.

Viewed through the lens of technological evolution, there is nothing unnatural in the human transfer of jobs to the AI of their own creation following the division of labor. For example, rice cultivation already involves machinery that takes care of the preparatory tillage, the subsequent transplanting of seedlings, and the harvesting of the rice. The replacement of taxis with driverless models in built-up areas is predicted to begin soon. Robots are now conducting many of the steps in surgical procedures. In these settings, it is merely the allocation of labor roles that is changing. Many more jobs will be entrusted to AI and robots. Yet, in these cases, it is only the allotment of jobs that is changing, while the bounds of reality remain the same.

Moreover, there is nothing unnatural in the changing level of detail in operations as the memory, image analysis, and data processing capacities of AI are utilized. If work can be executed with a higher level of minute skill, there is no reason to prevent it. However, if a reality that cannot be directly observed by humans is brought to light when this happens, and things come to be understood via a method of calculation different from that used by humanity, hitherto absent elements will enter the human experience.

It is believed that changes in the allocation of work within reality will bring few changes that encroach upon the “human” himself. The everyday worry of humans that they might lose their job will continue to remain as a matter of course. However, the bulk of that concern originates in the considerable barrier presented by potentially having to disregard all of one’s previous knowledge and begin again, perhaps every two or three years, and the attendant uncertainty. Humans lead a biological existence: eating, sleeping, defecating – living – each day. Yet, this is not all. Humans live in control of themselves while possessing a self-image. The self-image that the human possesses is the “human,” and there are bounds to the reality corresponding to this “human.”

However, we must question the possibility of reality itself changing its contours and transforming boundaries. When this happens, the “human” that has been the “stronghold of reality” will, at least, undergo a change in position, and may, depending on the situation, become obsolete and unnecessary. A certain tendency toward changing the bounds of reality can be observed within what is generally termed “virtual reality.”

The Limits of Noesis (Cognitive Knowledge)

At this juncture, philosophy does not simply lose the security of noesis and the correlatively understood “world.” A collapse of the major, implicit premise of the world’s “natural reality,” seen from Aristotle to Kant, would give rise to the question of what noesis actually does. The first object of the attack would be the question of whether the world and noesis come into being correlatively. When Kant attempted a theory of noesis, the world and noesis were clearly correlative. Further, without accepting this premise, it becomes meaningless to discuss the nature of noesis in detail. If the framework of noesis is being discussed in detail and yet it is positioned at cross-purposes with the world from the start, the question of what is actually being scrutinized becomes renewed.

The arguments of Meillassoux and Gabriel find their basis in the treatment of “contingency.” There are many options and possibilities around the questions of (a) in which scenarios does contingency function effectively in the formation of knowledge and (b) how did the formation of knowledge itself

begin. Meillassoux argues that contingency is inherent in all scenarios based on the “the necessity for contingency.” Gabriel, meanwhile, based on the contingency of necessity, grounds his argument saying that, however necessary something may appear, contingency cannot ultimately be eliminated from the formation and verification of that necessity. The necessity of contingency and the contingency of necessity are separated by a wide gap, the significance of which is elucidated by arguments with more possibility for development.

When something appears contingently, for example, and if subjectivity itself is bound up in that appearing thing, there is more occurring beyond the subjectivity apprehending the appearing object. At that moment, “existence” cannot be understood in contrast with the subject. Neither can the object be grasped by noesis when the former continues to change and its endpoint and predicted result cannot be anticipated. This is the point at which the possibility of the wide-ranging concept known as “new realism” emerges.

When dealing with the problem of infinity, too, subjectivity cannot be limited to itself. It is not easy to respond with the assembled preexisting tools of philosophy to questions on the kind of existence infinite things have. This is because infiniteness is established by an operation other than noesis. Under the operations of noesis, at the most we can picture “enumerable infinity.” This is because we can imagine an anticipated sum of repetitions reached through the endless reiteration of operations whereby addition and other mathematical processes are continuously effected. However, there remain no operations capable of mapping to noesis the case of innumerable infinity.

In the case of the environment, because it in fact surrounds the subject of noesis, it is not itself the object of noesis. The place in which noesis occurs cannot become the object of noesis. In this manner, the question of the limits of noesis reappears. As the 19th century drew to an end, du Bois-Reymond expounded his argument on the “limits of knowledge.” At the core of his argument was the claim that, as knowledge expands, we cannot reach “objects themselves” or “force itself,” and a group of arguments labeled Neo-Kantianism once again began to gain traction around this time.

Objects and motion themselves are limiting concepts within noesis, and hence, can only be treated as separate from it. For example, we try creating objects from energy, and energy from objects. The material is converted to energy on the surface of the sun. This occurs through nuclear fusion. Nevertheless, even if one strives to arrive at an object’s or force’s ultimate nature through poiesis, it would be impossible as poiesis is not guided by noesis, and hence cannot be recovered by it.

The greatest issue with correlationism is that the formation of the noetic subject itself is incorporated neither as fact nor as question and that, moreover, correlationism lacks even the tools required to shed light on this question. The cognizing subject is formed within an environment. This formation process raises questions distinct from those of developmental psychology. The formation of one’s faculties comes to an end as one becomes a rational adult although there is little expectation that they will be complete at this point. Not only will the reality of the world change, but also the subjectivity of noesis itself will undergo transformation. If we do not incorporate these scenarios and establish our arguments, classical epistemology itself will be reduced to rearranging past data.

The Task of Philosophy

In this manner, the former “existence” was replaced with the debate over a constantly changing “reality,” and the parceled category clusters that had been the conditions for the possibility of noesis were exchanged for a discussion on a continually forming subjectivity. Against this backdrop, the

actual task of philosophy was once again brought into question.

Philosophy is an activity that having found an issue and formulizes it in the most generalizable form possible. Alternatively, it is the sum of activities rendering visible hitherto invisible realities. Furthermore, it is not limited to interpreting reality, but may advance arguments to the effect that it may become necessary to change reality itself. We are likely to see assertions that it is not the question of how to interpret reality that is of vital importance but the actual changing of that very reality, as in Marx's *Theses on Feuerbach*. However, philosophy is unfortunately not so powerful to change reality, and changing reality is not, in the final analysis, its task. Philosophy would in fact be infinitely dangerous if it had such power.

In fact, philosophy, by itself, does not possess considerable problem-solving ability. In most cases, problem-solving is entrusted to science and technology, medicine, law, and economics, which demonstrate overwhelmingly superior capacities. During the formation of one's faculties too, the arts often demonstrate superior results to philosophy itself. Philosophy clearly formulates challenges, establishes guiding principles, and presents multiple options. As a result, it plays the role of a coordinator for the effective advancement of procedures, and in fact can do no more.

It may be thus considered that it has become necessary to determine new tasks for "philosophy" in relation to our "continually transforming reality," which however cannot be resolved by the traditional form of questioning. For example, on the themes of "time" and "existence," we cannot ask questions on the lines of what is "time" and what is "existence." Asking questions that seek to establish what things are is now at cross-purposes with matters as they stand. Placing these topics as the grammatical subjects of their questions is also hugely problematic: the truth is not brought into question in the form of the subject. It is thought necessary to relate to questions in the order of what kind of experiences are time and existence, or whether notable features of the matter come to light when certain kinds of experience are foregrounded. Thus, philosophy must change its method of posing questions and, further, these matters cannot be understood if these questions are formulated with respect to languages. This may be the era in which language ceases to be an easy-to-use philosophical tool.

Presently, the tasks of philosophy may be, first, to shed light on the question of whether there are further options somewhere within our changing reality alongside concepts rooted in reflection; second, to explain the orientation around patterns that can effectively develop these choices; and, third, to predict the extent to which human, societal, and experiential possibilities will expand as a result of the aforementioned patterns. In light of this, we are faced with the question of which configuration can be adopted in preparation for shaping 22nd-century world philosophy.

2 Philosophy as Research Program

In critiquing his teacher Karl Popper's theory of scientific method (falsificationism), Imre Lakatos established a separate framework, labeling his own concept as the "research program." Central to this framework is the fact that various concepts and ideas are not abandoned even when disproved but utilized in different ways following minor alteration, and that the positive or negative aspects of a program are judged based on whether it is progressive or degenerative, at which point the accumulation of observational evidence and the capability of the program in solving its definitive and important problems become defining features. Programs are thus projected to follow a

concentric model with a group of ideas at its center (unit ideas) and a surrounding cluster of observational evidence (the “protective belt”). In Newtonian mechanics, Newton’s three laws of motion are unit ideas, remaining untouched by falsification procedures and separated from the notion of correctability. Observational evidence corresponds to peripheral expansion within each domain, as with materialism and optics. When they have been thus positioned, the unit-ideas traditionally correspond to “First Philosophy” and “Logic,” while the protective belt is understood to correspond to domain specific philosophies.

While this unit-idea segment likely does exist, the concept itself varies greatly according to the nature of its collection of established rules.

Classical Mechanics: Classical mechanics involves the rules under which final conclusions are determined when initial conditions are fixed. In the concept of free fall, distance to an end-point and its timing are determined when the starting position and duration of the fall are fixed. In these cases, the procedure is one of fixing the rule constants to fit the result. The gravitational constant corresponds to this procedure. This is a procedure whereby the point of departure is prefixed so as to fit the result. In other words, the mechanism involved in classical mechanics is essentially a variety of teleology; the mechanism is a kind of the teleology in a new guise.

Conservation Law: The laws of thermodynamics are structured differently. The conservation law establishes the major premise that something present at the initial or starting point is conserved in the final state. This premise is applied to concepts like the law of conservation of energy. The idea of conservation has prevailed since ancient times; later, it was established as “the Great Chain of Being,” and now it takes such forms as the law of conservation of momentum, the law of conservation of mass, and the law of conservation of energy. The distinctive feature of the conservation law is that, while a property is conserved from the initial stage to the final stage, one cannot specify what happens between these two points. When striking a match, it may ignite; yet, equally, it may only smoke, or the matchstick may break. Expressed in terms of energy amounts, the whole, potential energy included, is covered by the law of conservation. Yet, one cannot specifically say what is happening in reality. In other words, the laws relating to conservation are characterized by “underdetermination.” Under these laws, only the wide outer framework is fixed, while what is happening internally is undetermined.

The Increase in Entropy Principle applies as a limited law within a global closed system. However, local decreases in entropy sometimes occur within such a global closed system. Typical examples include nuclear fusion and the emergence of life.

Self-Organization and Chaos Theory: When one causes a physical object like a piece of paper to fall, it may fall in a number of different ways. One cannot predict the manner in which it will fall. Chaos theory is expressed mathematically such that all factors are necessarily determined. Yet, predictions of individual motions are ineffectual. Chaotic motion is the general term for aperiodic and irregular motion. Blood does not flow at a fixed speed nor in units of a fixed quantity but fluctuates internally. The distinguishing feature of this motion is its sensitivity to slight differences in initial conditions. The same operation can give rise to different states each time it occurs (the baker’s transformation). There are many dimensions other than integer dimensions (for example, dimensions of 2.26, 3.14, etc.).

Phenomena like vortices and tornados are typical examples of “emergence.” Certain forms of motion only appear spontaneously. There is no specific reason or cause underlying a given

occurrence. Internal randomness (fluctuation, contingency and unnecessary) is included within the system. The chain of processes by which certain forms of motion appear from internal randomness is “self-organization.” This process causes the internal appearance of a new reality.

A “form that sustains motion” while drawing in surrounding energy is called a “dissipative structure” (e.g., vortices and tornadoes), while an “equilibrium structure” is a by-product of a form of movement that remains when motion ceases (e.g., crystallization). In mathematical terms, this is akin to the emergence of a new variable. However, this variable generally vanishes within a short time. When a stable form of movement appears, this is referred to as the formation of a “new species.”

Characteristics of Philosophy: While considering the mechanisms and characteristics of the above scientific formulations, I will now contemplate on the characteristics considered necessary for philosophy.

First, it is necessary to topicalize experiences of the kind found at the center of processes. Complete noesis in the midst of a process is impossible. Conversely, the “noetic-act-experience” found in settings where noesis and act are connected is topicalized.

To also posit that complete noesis comes into being in the midst of a process would be stretching the argument too far. Whitehead’s *Process and Reality* provides an example of this. Deleuze’s *Difference and Repetition*, meanwhile, topicalizes both processes and the experience of being present in a process. The topicalized experience here is “intensity.”

Viewed in terms of cognitive science, ecological psychology questions the perception centered within action. The indicators used when adjusting one’s speed or direction while in motion are “optical flow,” while the indicator used to decide one’s reaction to an object flying toward one, or is otherwise approaching, is the “time remaining between the acting subject and an object.” This time, the remaining time of the approach, is of a distinct character. Gibson describes this as “ecological perception.”

It is “autopoiesis” that incorporates the question of how “options for new actions” are established within processes. Autopoiesis has two central axes. The first is found in the intermittent appearance of recurring operations within sustainable systems. Represented visually, the system continues to operate in a circular manner. The system is merely maintaining its operation. Yet this very maintenance gives rise to a separation of the internal and from the external, followed by the separation of self and the environment. Simply by continuing its operation, the system simultaneously and continuously gives rise to other states. This is the scene of category emergence. I have come to term the simultaneous and continual creation of other states through the performance of a given action as “dual operation.”

When the system has maintained its operation in a circular manner and separated the internal the and external, the second axis of autopoiesis arises in the question of how to decide which is internal and which external. Fixing either a shift in viewpoint or a principle that decides which is the internal presupposes the existence of a principle that determines the internal. The system must fix the internal through its operation. “The sense of touch,” that is, “tactile sense” is at work here. When the sense of touch touches external reality, the self too is touched. It is the sense of touch that bears the burden of the dual operation of noesis and the bifurcation of touch.

The second characteristic of philosophy lies in the question of how to adopt the mechanisms relating to the manner in which the noetic-act-experience that is within processes brings about “self-formation.” Experience becoming higher-order and turning toward an elevation that observes all

things itself reduces the possibilities of experience. Knowing what the occurring phenomena are transforms the self to a gaze that observes differently from the noetic act.

Faced with a phenomenon grasped as an observer observes, experience must be advanced while the phenomena themselves may yet appear. Here, a distinctive “reduction–bracketing” is necessary. This can be expressed in various ways, including making an act function such as to betray the observer, acting to increase the options for acts within the observer’s field of vision, or utilizing an image within one’s noetic abilities to expand the possibilities for acts.

Transcendental Empiricism: The genealogy of philosophy able to internalize these two components is generally labeled “transcendental empiricism.” Within the history of philosophy, we can add a further branch descending from Schelling, Bergson, and Deleuze. (The history of philosophy is a treasure trove for the drawing of additional branches.) Its headings can be set out as follows:

(1) Questioning of foundational arguments is carried out not from a foundation of knowledge but along a course that widens the options for knowledge. Foundational arguments are continually used to suggest the possibilities that reality may be otherwise.

(2) As a result, the premises are explained in the form of always-provisional configurations (assumptions, theses, setups); explanation is thereby restricted to transcendental relativism (Husserl).

(3) The bounds of reality are not predetermined. On the contrary, various subject matters and empirical information are utilized to move toward an expansion of reality.

(4) There is no explanation of the conditions for the possibility of experience; rather, the conditions for the possibility of the expansion of experience are called into question. In other words, inquiry is directed toward increasing the possibilities of experience itself and heightening its flexibility. With Hegel, not fulfilling (3), this turns into transcendental teleology. This is an absolute idealism wherein purpose does not exist externally but within a system. In other words, the boundaries of phenomena are predetermined.

(5) Phenomena are considered with reference to the possibility that they could always be otherwise. The presentation of options that advance experience becomes central, rather than logical skepticism. If ideas and inspiration can be spread to diverse domains including empirical science, art, and techniques of the body, the bounds of reality will change by themselves. This will be all the more effective as it is often unknown what exactly has happened, particularly when approaching the body.

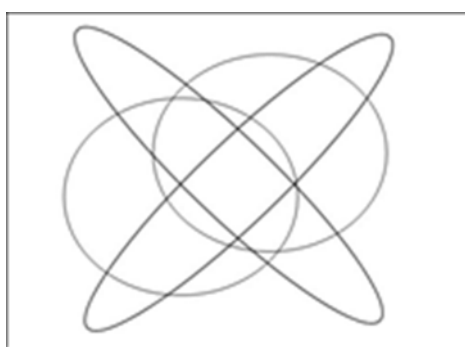
(6) It is considered necessary to ensure that there are options somewhere within the mechanisms of contemplation. For example, objects such as currency, nation, or indeed language come to be questioned in connection with what constitutes their authenticity. In the case of currency, there are in fact many in use alongside legal tender, and there is no way to determine an authentic one. The boundaries of language, too, cannot be fixed. Simply playing music on Instagram fulfills a linguistic function. There is no way to determine what makes an authentic nation. We are approaching a stage in which cyber nations will be possible. The definition of a nation is that it has sovereignty, a territory, and a people. The “extremist state” that claims responsibility when terrorist acts occur all over the world likely exists in the cyber phase-domain. The concept of territory can no longer be restricted to the physical.

(7) In this case, the operations of reality are heavily reliant on what they use as a model. Schelling uses non-equilibrium mechanics while Bergson uses what should be termed a “theory of human evolution.” When these models contain an “issue” that is not easily resolved, there develops a

philosophy with inward and vertical depth. In a sense, this heuristic process for the discovery of issues decides the success or failure of this type of philosophy.

Items like those mentioned above are established as the unit-ideas of transcendental empiricism. These items can be added to as necessary, and may be partially rewritten. Individual domain specific systems are then formed in the periphery. Peripheral systems form their own domains. There are psychiatric systems, geo-economic systems, ecological systems, information systems, ethics systems, art systems, and more, and when these shift toward expansion, the central system, that is, the whole system succeeds.

The conceptual diagram below represents each domain. An *Enzyklopädie* of transcendental empiricism would take this pattern. The pattern itself is an “absolute pluralism,” with each domain growing in response to bold ventures and the possibility of development.



Philosophy does not immediately appear within this diagram. Moving between various partially domain specific systems, it activates each of these domains in an inter-disciplinary manner (coordinator act), approaches emergence when a new domain arises (act of discovery), finds other forms of choice in a mode of rediscovery within stagnating systems, and as a whole creates new realities. Philosophy passes through individual domain specific experiences, changing their form (metamorphosis) each time it does so, and moves forward while improving the mode in which the experience itself progresses. If a “name for the subject of the experience” that is molded as it changes shape is necessary, then the “mind” (Geist) may be considered fitting.

(1) The activity that forms a sustainable system making use of certain leads and materials is a productive act that relates to the arrival and maintenance of the system itself. For example, discovering new rehabilitation techniques is a productive act if they continue to function sustainably, and discovering techniques of artistic production is a productive act if they continue to function consistently. Further, orienting function in various ways in the midst of the operation of a pre-existing system, while being present in the movement of the system, is a corrective act and traditionally an extension of ethics. Moreover, if regularity is discovered in the movement of individual systems and a rule is extracted, this raises the question of genuineness. This is a cognitive act. The rule itself shapes a shadow region for the operation of each system. The minimum logic that forms the premise of the rule is the prerequisite for the operation of the system.

(2) These acts shape the codes of progress/stagnation, freedom/restraint, truth/falsehood, becoming further subdivided specifics under each individual code. This is the program that is formed, diverging

within each system. These codes traditionally correspond to beauty, good, and truth, overturning them and progressing experience.

(3) Each system naturally divides self and environment through its own operations. The observer indexes the aggregate of each environment, what should be termed “the environment of the environment,” and can access a sort of symbolic “overall representation.” This is the “world.” The “world” can provide various prompts for a system’s building and formation; its operation, adjustment, and orienting; and for assessing its validity. The operations of the system are not guided by the world, but rather have no choice but to bracket the world continually as they advance. This is “behavioral reduction,” and the world remains in external intimacy (extimacy) through reduction. The image of the world, responding to the operation of the system, changes shape each time.