

THE RELATIONAL MODE OF BEING OF CONCEPTS

Towards a Generative Relational Epistemology

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Abstract

Prior work in the generative relational framework (hereafter GRB) developed an ontology of relational presence, an account of how a shared world arises from the bond between subjects. This paper carries the same framework from the register of being into the register of knowing, and advances the claim that knowing is itself relational. It begins from a limitation that traditional epistemology leaves unexamined, the supposition that a concept can be adequately carried by a single symbolic system, so that knowing becomes the search for a correct definition and its work is finished once representation is secured. Against this supposition the paper develops the relational mode of being of concepts. A concept exceeds any one symbolic system, and it becomes observable through the relations among several symbolic expressions of it, among which a natural language, a mathematics, a psychoanalytic vocabulary, a political economy, and a neuroscience each render a partial and situated aspect. From this the paper draws its central epistemological term. Knowing takes the form of generative observation, an epistemic achievement that stands short of ontological identity, historically situated and symbolically mediated and for that reason incomplete. Three consequences follow. Interdisciplinarity is shown to be an ontological consequence of the relational mode of being of concepts, since the crossing of symbolic systems furnishes the condition of observation. Dialogue is shown to be an epistemic necessity, the relational process through which concepts become progressively observable, a result that reinterprets the Socratic form of philosophical education. And truth is shown to be historically generated, a becoming that moves with the dialectical development of material and relational conditions. The paper closes by turning this account upon itself. A theory that claims completion arrests the generation it describes, and so GRB is held to stand within the history it theorizes, co-generated in dialogue and open to further development. The paper advances no final synthesis, and leaves its central questions open in the manner its own account of theory requires.

Keywords: generative relational epistemology; relational mode of being of concepts; observation; representation; interdisciplinarity; dialogue; Socratic education; dialectical materialism; generativity; truth as historical generation.

AI usage statement: The ideas, claims, and theoretical framework of this paper originate with the author. AI tools were used as an aid in drafting and revision. The origin of each idea has been verified by the author, who takes full responsibility for the content.

1 INTRODUCTION

The generative relational framework was first developed as an ontology. It gave an account of how a shared world arises between subjects, how value comes to rest in the bond that the reproduction of signs cannot dissolve, and how presence comes to be generated in the bond. That account concerned being. The present paper carries the same framework into a second register. It turns from the generation of a world between subjects to the manner in which anything is known, and it advances the claim that knowing is relational in the same manner that

being was shown to be relational. The extension carries the framework to a level at which the framework turns upon the activity of knowing by which frameworks are themselves held, and for that reason it belongs to the foundations of the project.

A question is often posed at present in the idiom of method. Why has inquiry come to require the crossing of disciplines. The usual answer names the complexity of the objects. Problems have grown intricate, it is said, and no single field commands the instruments an intricate problem demands, so the disciplines are joined for the sake of a more complete explanation. This paper holds that the usual answer mistakes a symptom for a cause. The crossing of disciplines is required by the relational mode of being of concepts, and it holds because no symbolic system, taken alone, exhausts the concept it renders. The complexity of objects is real, and it operates as a further occasion of crossing while the ground of the necessity lies elsewhere. The ground lies in what a concept is and in the way a concept becomes available to be known.

Traditional epistemology proceeds, for the most part, on a supposition it does not examine. It supposes that a concept can be adequately carried by a symbolic system, that there exists, at least in principle, a correct expression in which the concept is fully set down. Knowing, on this supposition, is the search for that expression, and the labor of inquiry is the refinement of definition toward adequacy. The supposition governs traditions otherwise opposed. It is present in the analytic search for the definition that states necessary and sufficient conditions, in the structuralist reduction of meaning to position within a system of differences, and in the project of knowledge representation that would set a concept down in a formal notation a machine can manipulate. Across these differences the shared assumption holds that a concept awaits its adequate symbol, and that the work of knowing is finished when the adequate symbol is found.

The account developed here begins by refusing that supposition. It holds that no symbolic system completes a concept, that every symbolization selects and compresses and situates and so renders a partial aspect, and that a concept becomes observable only through the relations among several such partial renderings. From this refusal the paper draws a term to replace representation. Knowing is generative observation. What is known is observed through the relations among symbolic expressions, the observation stands as an achievement that falls short of identity between the known and the real, and because the relations among expressions increase and change through history the observation is never final and the knowing continues.

This refusal carries a shift in the question philosophy asks of a concept, and the shift locates the paper's contribution. Analytic philosophy has asked, in the main, what a concept is, seeking the conditions an instance must satisfy to fall under it. The cognitive sciences have asked how a concept is represented, seeking the format in which a mind or a machine holds it. The present paper asks a third question. It asks how a concept becomes observable, by what epistemic access a concept that no symbol completes is reached at all. The move is a shift of the central problem from the representation of concepts to their epistemic accessibility, and the answer the paper gives, that a concept becomes accessible through the relations among its several symbolic expressions, opens a philosophy of concepts organized around access where the older questions were organized around constitution and format.

The shift carries with it a claim about relations that the paper states plainly, since it is the deepest of the paper's commitments and the one a hasty reading passes over. On the received understanding, a relation connects items of knowledge already secured, joining what is separately known and adding nothing to the knowing of either. The account developed here assigns relations a stronger office. Relations among symbolic expressions are epistemically generative. They are productive of observation, and they bring a concept into view that no one of the related expressions holds on its own. The relation does the work of disclosure, and the concept becomes observable in the relation and through it. This is a stronger philosophical statement

than the claim that knowing a concept requires several symbolic systems, for it locates the epistemic yield in the relations themselves and makes the generativity of relation, and not merely the plurality of expressions, the ground of observation. The consequences the paper draws follow from this generativity of relation, and the paper returns to it wherever a relation is shown to generate an observation that its terms did not separately contain.

A word on how these claims are argued belongs here, since it governs how they are to be received. The paper proposes the relational mode of being of concepts because it provides the most coherent explanation of a set of phenomena that the representational picture leaves disconnected, among them the limits of representation, the necessity of crossing disciplines, the indispensability of dialogue, and the historical development of truth. The thesis is advanced as the hypothesis that best explains these phenomena together, and the reader is asked to accept it on the strength of that explanatory yield and not as a self-evident metaphysical fact. The section that sets out this inference to the best explanation states the phenomena and the argument in full, and the language throughout in which a concept is said to have a relational mode of being is to be read in that key, as the assertion of a well-supported explanatory hypothesis open to a better one.

The remainder of the paper develops these terms and draws their consequences, of which three are principal, that interdisciplinarity is an ontological consequence, that dialogue is an epistemic necessity, and that truth is historically generated. The paper advances no final synthesis, and closes on questions that its own account of theory requires it to leave open.

2 THE SYMBOLIC LIMITATION OF CONCEPT

The tradition to be displaced can be stated as a schema. Reality stands first, a concept arises as the mind's grasp of some region of reality, and a symbol is then found in which the concept is set down, so that the symbol represents the concept and the concept represents its region of reality. Knowledge, on this schema, is the possession of adequate symbols, and the criterion of adequacy is the fidelity of the symbol to the concept it carries. The schema is rarely stated so plainly, and it operates the more firmly for remaining tacit. Its force is felt wherever inquiry is understood as the pursuit of the expression that will state the matter correctly and close the question.

The schema governs the analytic search for definition. To define a concept, on this understanding, is to state the conditions an instance must satisfy to fall under it, and the definition succeeds when its conditions are severally necessary and jointly sufficient. The labor of the tradition, from the examination of knowledge as justified true belief through the counterexamples that unsettled it, proceeds by proposing a symbolic expression and testing it against cases, in the expectation that a sufficiently refined expression will at last state the concept without remainder. The expectation is the schema. It supposes that the concept is the kind of thing a definition can exhaust, and that the failures met along the way count as failures of a particular definition and leave the form of definition itself unquestioned.

The schema governs structuralism as well, by a different route. Here meaning is lodged in the position a term holds within a system of differences, and the correspondence between symbol and thing gives way to that position, so that a concept is what its oppositions and contrasts within a closed system make it. The move away from reference is real, and it does not leave the schema behind. It relocates adequacy from the single symbol to the system of symbols, and it supposes that the system, taken as a whole, sets down the concept without remainder. The concept remains that which a symbolic order, now enlarged from the term to the structure, is held to complete. The relational insight is present in structuralism and is confined within a

single system, and it is precisely this confinement that the present account will open.

The schema governs, most explicitly of all, the project of knowledge representation in the sciences of the artificial. There a concept is to be set down in a formal notation, a logic, a graph, a vector, so that a machine can store and manipulate and reason upon it, and the adequacy of the representation is the measure of the system's grasp. The project makes the tacit schema into an engineering program. It supposes that for a given concept there is a representation that captures it well enough for the purpose, and it treats the residue that no representation captures as noise to be reduced, and it passes over the possibility that this residue marks a structural feature of the relation between concept and symbol. The recent turn to distributed representations complicates the notation without disturbing the supposition, for a vector that locates a concept in a space of learned relations is still offered as the representation that captures it.

Across these traditions one supposition holds. The concept awaits its adequate symbol, whether the symbol is a definition, a position in a structure, or a formal notation, and knowing is the finding of that symbol. The present account denies the supposition at its root. It holds that no symbol and no system of symbols completes a concept, because symbolization is by its nature an operation that selects and compresses, and that the residue no symbolization captures carries the mark of a mode of being that the following section sets out, where a representational reading would treat that residue as mere noise.

The denial of the representational supposition is not itself new, and the account gains by saying so plainly where a claim of novelty here would lose it credit. Several traditions have already unsettled the picture of a concept awaiting its adequate symbol. Kuhn [10] showed that the terms of a science shift their sense across the transitions between paradigms, so that no fixed representation carries a concept through the history of inquiry. The later work of Wittgenstein [19] displaced the search for defining conditions with an attention to the uses a word bears within a form of life, so that meaning comes to rest in a practice a single definition cannot close. Gadamer [3] developed an understanding that proceeds through the historical situation of the interpreter and the fusion of horizons, so that a concept is reached through a dialogue with tradition a final formulation would foreclose. Polanyi [16] drew out the tacit dimension of knowing, the personal and unspecifiable ground on which explicit representation rests. These traditions establish that representation is limited, and the present account stands on their achievement.

What the present account adds lies at a different level. Those traditions show that representation is limited, and they locate the limitation variously in the history of science, in the practices of a language, in the historicity of understanding, and in the tacit ground of skill. The account developed here supplies a reason for the limitation that lies in the concept itself. Representation is limited because a concept has a relational mode of being, because it is exhausted by no single symbolic system and becomes observable through the relations among several of them. The limitation of representation is a symptom, and the relational mode of being of concepts is the cause. This is the contribution the paper claims, and it is stated as such so that the reader may weigh it against the achievements it builds upon.

3 THE RELATIONAL MODE OF BEING OF CONCEPTS

The account offered here can be stated first and defended after, and its defense, given in the section that follows this one, takes the form of an inference to the best explanation. A concept has a mode of being that no single symbolic system renders. It exceeds any one of its symbolizations, and each symbolization, a rendering of it in a natural language, in a mathematics, in a psycho-

analytic vocabulary, in a political economy, in a neuroscience, sets down a partial and situated aspect of it. The concept does not appear directly in any of these renderings. It becomes observable through the relations among them, as a form is inferred from several projections none of which is the form. The claim requires care in its statement, for a careless version collapses into a position this account rejects.

One point of care must be marked at the outset and held throughout. To say that a concept exceeds its symbolizations is not yet to settle whether it stands prior to them as an independent structure, whether it emerges from the relations among them, or whether the question of its independent standing is one the account should leave suspended. These three construals yield three different epistemologies, and the choice among them fixes the final form of the account. The present paper does not make that choice, and it develops the relational mode of being of concepts in terms neutral among the three, reserving the question of the concept's ontological status for the late section that takes it up directly. The reader is asked to hold the stronger metaphysical questions open until then, and to read the language of a concept that exceeds and is observed as committing the account to the fact of the excess and the mode of access, and not yet to a verdict on what the concept ultimately is.

Consider first two concepts that press the point. The infinite has been rendered in many symbolic systems, in the potential infinity of a process without last term, in the completed infinities of set theory with their orders of magnitude, in the theological infinite of a being without limit, in the vanishing and the unbounded of the calculus. These renderings do not agree, and they are not reducible to one another, and yet they do not seem to be renderings of different things arbitrarily sharing a word. They behave as partial observations of a single matter that exceeds each of them. Justice presses the point from the other side. It is rendered in a jurisprudence, in an ethics, in a theology, in a political economy, and these renderings conflict at their foundations. One may draw from the conflict the conclusion that justice does not exist, that the word names no single matter and only marks a site of contest. One may draw instead the conclusion that justice exceeds every one of its symbolizations, and becomes observable only through the relations among them. This paper draws the second conclusion, and the difference between the two conclusions is the whole matter of this section.

The care the claim requires is a distinction between two statements that a hasty reading conflates. The first statement holds that a concept is a relation, that there is nothing to the concept beyond the play of its symbolic expressions and their differences. The second holds that a concept becomes observable through relations, that its mode of being is such that it is reached only by way of the relations among its expressions, while the concept is not exhausted by those relations and is not dissolved into them. The first statement is a version of social construction, and it dissolves the concept into the symbolic activity that renders it, so that the infinite and justice become artifacts of vocabulary with no purchase beyond it. The second statement holds a mode of being for the concept that the symbolic activity brings to observation without exhausting, and it leaves open, for a later section, whether that mode of being stands prior to the relations or emerges within them. The present account holds the second statement and refuses the first. What the relations among expressions afford is observation of the concept, and observation, as a later section develops, is an epistemic relation to something that exceeds it, a relation that stops short of identity with it.

The situation is shown in Figure 1, in which the concept forgoes the center as a visible node. What is visible is the expressions and the relations among them. The concept is the matter these relations allow to be observed, and it is marked by its position among the expressions, holding no node of its own.

Figure 1 is to be read against the schema of the preceding section. There the concept stood as a node to be captured by an adequate symbol. In the figure the concept occupies no node

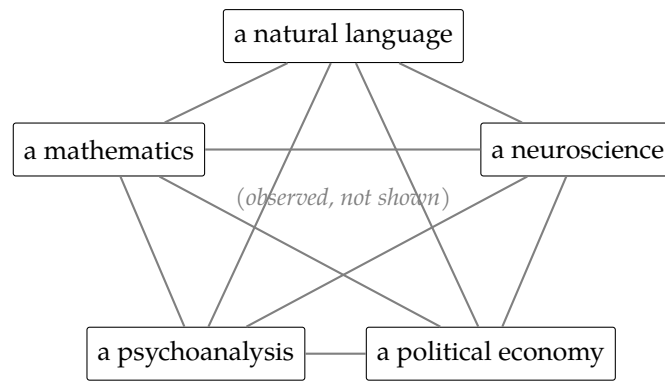


Figure 1: The relational mode of being of a concept. The visible structure is the several symbolic expressions and the relations among them. The concept occupies no node of its own and becomes observable through those relations, marked here by the empty center.

at all. The nodes are the expressions, each partial, and the concept is what the relations among the expressions allow to be observed. To seek the one adequate expression is to seek a single node that would make the others unnecessary, and the account holds that no such node exists, since each expression renders an aspect the others do not, and the observation lives in their relation and in no single one of them. From this the governing principle of the account can be stated.

The five nodes of the figure can be given content by a single example. Take desire as the matter to be observed, and consider how each of the five symbolic systems the figure names renders it. A natural language renders desire in the vocabulary of wanting and longing and lack, a field of everyday speech that marks the experience of being drawn toward what one does not have. A mathematics renders desire as a preference ordering over outcomes and a utility that a rational agent maximizes, the form it takes in the theory of decision, where wanting becomes a ranking that a function represents. A psychoanalysis renders desire as the movement set in motion by a constitutive lack, directed upon an object that stands in for what no object supplies, the desire that circles its cause without reaching it. A political economy renders desire as a demand that is produced and organized, a want manufactured and directed toward the commodities whose sale depends upon it. A neuroscience renders desire as the activity of a dopaminergic system that codes the anticipation of reward, a signal of prediction and its error in the circuits that drive approach. These five renderings do not reduce to one another. The utility function omits the unconscious cause the psychoanalysis makes central, the neural signal omits the social production the political economy makes central, the everyday vocabulary omits the formal structure the mathematics supplies, and no one of the five holds what the others hold. Desire itself appears in none of the five nodes. It is observed in the relations among them, in the passage from the ranking to the circling cause, from the reward signal to the produced demand, and this is the empty center the figure marks. The example fills the figure without disturbing its lesson, since the concept observed remains the matter between the nodes and takes no node of its own. The five nodes, moreover, did not arrive together. The rendering of desire as a utility, the rendering as a lack that constitutes the subject, the rendering as a dopaminergic signal, each entered the history of the observation of desire at its own moment, and each arrival opened relations to the others that were unavailable before it, so that the field of relations the figure displays is the present state of a history still under way. A later section returns to this historical generation of the field.

The Observation Principle. A concept is never exhausted by any symbolic system. It becomes observable only through the relations among several symbolic expressions of it. Every such observation is historically situated, symbolically mediated, and for that reason necessarily incomplete.

The principle has three clauses, and each does work in what follows. The first clause, that no symbolic system exhausts the concept, denies the supposition of the representational schema and grounds the necessity of crossing symbolic systems. The second clause, that the concept becomes observable through relations, states the positive mode of access and distinguishes observation from the direct grasp the schema assumed. The third clause, that every observation is situated and mediated and incomplete, carries the epistemic humility that the next section draws out, and prepares the account of truth as historical generation, since an observation that is always incomplete is an observation that history can always enrich.

4 THE ARGUMENT AS INFERENCE TO THE BEST EXPLANATION

The relational mode of being of concepts has been stated, and the manner in which the paper argues for it should be made explicit before its consequences are drawn, since the form of the argument governs the strength of the claim. The paper does not offer a direct demonstration that a concept has a relational mode of being, as though the thesis could be read off from an inspection of concepts taken in isolation. It offers the thesis as the hypothesis that best explains a range of phenomena that the representational picture leaves obscure. The argument is an inference to the best explanation, and marking it as such places the claim at the level of a well-supported explanatory hypothesis, open to the improvement or the displacement that a better explanation would bring.

The phenomena to be explained are four, and each stands as a fact about knowing that inquiry meets independently of the present account. The first is the necessity of crossing disciplines, the circumstance that inquiry into a concept of any depth draws on several fields and loses something of the concept when confined to one. The second is the indispensability of dialogue in the formation of understanding, the circumstance that philosophical education has proceeded through exchange across its history and that new understanding arises in the meeting of expressions, where the delivery of one expression alone would leave it unformed. The third is the historical development of truth, the circumstance that the observation of a concept is enriched as inquiry furnishes new expressions and new relations, so that knowing has a history that is more than the correction of error. The fourth is the incompleteness of symbolization, the circumstance that every rendering of a concept in a symbol leaves a residue no refinement of the symbol removes. These four are set out at length in the sections that follow, and they are named here as the explananda the hypothesis is offered to explain.

The representational picture accounts for these phenomena poorly. On that picture a concept awaits its adequate symbol, and the crossing of disciplines, the labor of dialogue, the history of inquiry, and the residue of symbolization appear as difficulties to be overcome on the way to the adequate symbol, features of an as yet imperfect state of knowledge that a completed representation would remove. The picture treats as defects to be repaired what present themselves as standing features of knowing, and its explanations of them borrow, at each turn, the premise that a single adequate symbol is in principle available, which is the premise the phenomena strain against.

The relational mode of being of concepts accounts for the same phenomena as expressions of a single structure. If a concept is exhausted by no one symbolic system and becomes observ-

able through the relations among several, then the crossing of disciplines is the assembling of those several expressions, the labor of dialogue is the generation of relations among them, the history of inquiry is the accumulation of expressions and relations through which the concept is progressively observed, and the residue of symbolization is the mark of the excess of the concept over any one rendering. The four phenomena, disparate on the representational picture, become four faces of the relational mode of being of concepts, and the hypothesis earns its standing by this unification.

Stated in this form the argument has a structure worth making plain. The representational picture fails to explain the four phenomena without strain. The relational mode of being of concepts explains them together and without strain. On the principle that the hypothesis which best explains the phenomena is to be preferred, the relational mode of being of concepts is to be preferred. The conclusion is held with the confidence that an inference to the best explanation affords, which is the confidence of a hypothesis well supported by its explanatory yield and answerable to any further hypothesis that would explain the same phenomena as well or better. This is the sense in which the paper advances the relational mode of being of concepts, and it is consistent with the suspension, in a later section, of the further question of the ontological status of the concept, since a hypothesis offered as the best available explanation does not thereby pronounce on the ultimate constitution of what it concerns.

The paper proposes the relational mode of being of concepts because it provides the most coherent explanation of a set of otherwise disconnected phenomena, the limits of representation, the necessity of crossing disciplines, the indispensability of dialogue, and the historical development of truth. The thesis is advanced as the hypothesis that best explains these phenomena together, to be accepted on the strength of that explanatory yield and held answerable to any hypothesis that would explain the same phenomena as well or better.

An inference of this form gains further support when the hypothesis is shown at work, and the section that follows sets out three cases in which a matter that resists a single symbolization becomes observable through the relations among the several frameworks that render it. The cases carry the argument from the statement of a structure to its exhibition on matters drawn from regions that lie far apart, and they show the generativity of relation in operation where a single symbol fails.

5 THREE CASES OF OBSERVATION ACROSS SYMBOLIC SYSTEMS

The argument of the preceding section is an inference from phenomena to the hypothesis that best explains them, and an inference of that form is strengthened when the hypothesis is shown at work on cases. This section sets out three. Each takes a matter that resists capture by any single symbolic system, exhibits the renderings that several frameworks give of it, marks what each rendering leaves out, and shows how the movement between the renderings brings into view what no one of them holds alone. The cases are drawn from regions that lie far apart, the political economy of the subject and the topology of desire, the metaphysics and soteriology of several traditions, and the mathematics of systems and the theory of the optimal, and their distance is part of the demonstration, since a principle that holds across such distance holds by more than the affinity of neighboring fields. In each case the matter observed is named by no term of its own, and the account speaks of it only as that which the several frameworks render, holding their renderings apart as expressions that observe from different sides and refusing the claim that they say the same thing.

5.1 ONE MOVEMENT IN THE MARXIAN AND LACANIAN FRAMEWORKS

Consider first a movement that a prior study in this framework read across two vocabularies at once, the movement by which a generative activity that circles a core no possession can occupy is turned, in the course of its mediation, into a demand upon a substitute the core cannot be. The Marxian vocabulary renders this movement as alienation. A subject engaged in a generative activity within a relation produces, in that activity, something that is then appropriated and set over against the subject as an alien power, so that the product of the subject's own relational activity comes to govern and to draw upon the subject from without. The rendering is precise about the appropriation and about the reversal by which a product of activity becomes a power over the one whose activity produced it, and it is silent about the structure of the desire on which this power takes hold. It does not say why the core of the activity resists occupation, or how the substitute comes to stand in for a satisfaction it cannot deliver, and these silences mark the aspect the Marxian rendering leaves out.

The Lacanian vocabulary renders what appears to be the same movement in other terms. A drive circles a core in the Real that no object occupies, and the movement of the drive around that core is turned, under a demand, into a desire directed upon an object that stands in for the core and fails it. The demotion of the drive to a desire fixed upon a substitute is the rendering the Lacanian vocabulary gives, and it is precise about the topology of the core and about the constitution of the subject in the circling and the failure, and it is silent about the political economy of the appropriation. It does not say who takes the product of the activity, or under what historical and material conditions the substitute is manufactured and sold, and these silences mark the aspect the Lacanian rendering leaves out.

The observation the case affords lives in the movement between the two renderings. Set beside the Lacanian rendering, the Marxian account of appropriation supplies the political economy the topology of desire omits, and the historical and material conditions under which the substitute is produced come into view. Set beside the Marxian rendering, the Lacanian account of the core and its circling supplies the structure of desire the account of appropriation omits, and the reason the appropriated product can govern the subject from within comes into view. Neither rendering completes the other, and neither is the other translated without loss. In the passage between them a movement is observed that is at once the appropriation of a relational product and the demotion of a drive to a desire, and this movement appears in neither vocabulary taken alone. The observation is generated in the translation, and it is the plainest kind of instance of the principle that a concept becomes observable through the relations among its expressions.

5.2 ONE VOID IN THE DAOIST, BUDDHIST, AND LACANIAN FRAMEWORKS

The second case reaches a matter still more resistant to symbolization, for the matter is itself a place that symbolization cannot fill. Several traditions, in the course of seeking a final ground for the order of the world, arrive at a core that no positive determination occupies, and each renders that core in a vocabulary of its own. The Daoist vocabulary renders it as an emptiness from which the ordered world proceeds, a nameless and unpossessable source around which the movement of things is organized and which no act of grasping holds. The rendering is generative in its cast, since the emptiness is that from which the ten thousand things come, and it is silent about the extinction of the grasping subject and about the constitution of desire in relation to the core.

The Buddhist vocabulary renders a core that is empty in a different key, an emptiness of own-being in which no thing possesses a self-standing essence, a rendering that turns toward release from the grasping that takes the empty for the substantial. The rendering is soteriological in

its cast, precise about the dissolution of the substantial and about the liberation that follows the seeing of emptiness, and it is silent about the generative procession the Daoist rendering makes central and about the topology of a desire that circles the void. The Lacanian vocabulary renders a void of its own, a lack in the Other and a place in the Real that no signifier fills, around which the desire of the subject is constituted and from which the subject's want takes its rise. The rendering is constitutive in its cast, precise about the subject that is formed in relation to the void and about the desire that the void sets in motion, and it is silent about procession and about release.

These three renderings are not one rendering, and the account does not say that the emptiness of the Daoist source, the emptiness of own-being, and the lack in the Other are the same. It says that three traditions, seeking a final ground, have each arrived at a core that resists positive determination, and that each has rendered that core in the vocabulary its concerns supplied, generative, soteriological, constitutive. The observation the case affords is generated in the movement among the three. The Daoist rendering discloses a generativity the Lacanian void does not carry, the Buddhist rendering discloses a release from grasping the Daoist source does not thematize, the Lacanian rendering discloses a constitution of the desiring subject the other two do not frame. Held in relation, the three bring into view a core that resists symbolization, that generates, that constrains grasping, and that constitutes desire, and no single tradition observes all of these at once. The case exhibits the principle twice over, since the matter observed is a place that symbolization cannot fill, and it is observed only through the relations among the several symbolizations that circle it.

5.3 ONE TERMINAL STATE IN THE ECONOMIC AND DYNAMICAL FRAMEWORKS

The third case carries the principle into the formal sciences, where the resistance to a single symbolization takes a form that the humanistic cases do not display, and where the movement between renderings discloses a matter that one of the renderings conceals. Consider the terminal state toward which a system is organized, the condition at which its movement settles. The vocabulary of dynamical systems renders this as an attractor, a state or a set of states toward which the trajectories of a system tend over time, whether a point at which motion comes to rest, a cycle it settles into, or a more intricate set upon which it wanders without escaping. The rendering is exact and it is free of any suggestion that the state so reached is a state that ought to be reached. An attractor is where the system goes, and the rendering attaches no worth to the going and no approval to the destination.

The economic vocabulary renders a terminal state of its own, the optimum at which no rearrangement can improve the position of one party without worsening another, a condition in which the possibilities of costless improvement are exhausted. This rendering, unlike the dynamical one, carries a charge of worth. The optimum presents itself as a state that is reached and that is desirable in the reaching, a condition the system ought to attain and at which it is right for it to rest, and the language of optimality attaches an approval to the destination that the language of the attractor withholds. The rendering is precise about the exhaustion of costless improvements, and it is silent about the source of the worth it attaches to that exhaustion, treating as a property of the state what is supplied by the framework that describes it.

The observation the case affords is generated in the movement between the two renderings, and it is an observation with a critical edge. Set beside the dynamical rendering, the economic optimum is seen to be, in its formal skeleton, a terminal state of a system, a place where a certain movement settles, and the dynamical rendering carries no worth attaching to such a place. The worth that the economic rendering attaches to its terminal state is thereby exposed as an addition the framework makes, a normative charge laid upon a structure that, observed from

the dynamical side, bears none. The translation reveals that the optimum is a stable terminal state to which a framework has attached the value of the desirable, and the question of the ground of that value, obscured while the optimum is viewed only from within the economic vocabulary, comes into view once the optimum is set beside the attractor that shares its structure and lacks its charge. Here the relation between renderings does more than assemble a fuller view. It discloses that one rendering has smuggled a worth into a structure the other shows to be worth-neutral, and the observation of that smuggling is available only in the passage between the two.

This observation has a historical condition that the case itself brings into view. The setting of the optimum beside the attractor requires that a mathematics of dynamical systems, with its notion of a terminal state toward which trajectories tend, be available to be set beside the economic optimum. Before the vocabulary of attractors matured, the optimum could be observed from within the economic framework and from the frameworks that preceded that mathematics, and the particular relation that exposes its smuggled worth was not yet available, since one of its terms had not yet come into being. The observation waited upon the historical arrival of a symbolic system, and the relation through which it is won is itself a historical acquisition. This point is taken up in the account of what the three cases show in common.

5.4 THE COMMON RESULT OF THE THREE CASES

The three cases run from the political economy of the subject, through the metaphysics of several traditions, to the mathematics of systems, and they show one thing in three places. Wherever a matter resists capture by a single symbolic system, whether because it circles a core no possession occupies, because it is a place symbolization cannot fill, or because its structure and its worth come apart under description, the matter becomes observable through the relations among the several frameworks that render it, and the observation is generated in the translation among them and found in none of them alone. The cases exhibit the four phenomena named in the argument from the best explanation. They show the incompleteness of each single symbolization, the necessity of crossing frameworks to observe the matter, the way a dialogue between vocabularies generates an observation neither holds, and the manner in which the observation of such a matter develops as further frameworks are brought into relation. A fourth or a fifth framework would extend each case, a neuroscience of the circling drive, a further tradition of the void, a thermodynamics of the terminal state, and the extension would enrich the observation in the manner the account predicts, by adding relations through which the matter is further observed. The cases are offered in this spirit, as demonstrations that the principle does work on matters that resist the single symbol, and as instances of the generativity of relation that the paper places at the center of knowing.

The cases as set out are snapshots, and a snapshot conceals the movement the account holds to be central. Two forms of historical generation run through them, and drawing them out completes the demonstration. The first concerns the meaning observed within a settled field of frameworks. Even where the frameworks in relation stay the same, the observation of the matter develops, since the omission of one rendering often becomes visible only once another rendering arrives to throw it into relief. The silence of the Marxian account about the topology of desire was not marked as a silence in advance. It became observable as an omission once the Lacanian rendering was set beside it, and the meaning of the movement the two frameworks render has developed accordingly, enriched through a relation that the history of these vocabularies made available. The observation is a historical acquisition even when the frameworks that afford it are given.

The second form of generation is the deeper, and it concerns the field of relations itself. The

relations through which a matter is observed are not a standing inventory awaiting discovery. They come into being in history, and a relation between two frameworks becomes available only once both frameworks have arisen and their juxtaposition has become possible. The third case shows this directly. The relation that sets the economic optimum beside the dynamical attractor, and through which the smuggled worth of the optimum is observed, waited upon the maturation of the mathematics of dynamical systems, and before that mathematics the relation was unavailable and the observation it affords could not be won. What was missing was not an insight that a sharper mind of an earlier time might have reached. What was missing was a term of the relation, and with it the relation itself. The relational field through which concepts are observed is therefore itself generated in history, and its growth opens observations that no earlier state of the field could reach.

These two forms of generation are the temporal face of the relational mode of being of concepts, and they are what the term generative in the paper's title finally names. Relations generate observation, and both the meanings observed within a field of relations and the field of relations itself develop in the dialectical movement of the material and symbolic conditions under which frameworks arise. The observation of a concept returns, across this history, to the same matter, the infinite, desire, the terminal state, and it returns to it in a field of relations grown richer, so that the return reaches the same concept observed anew and does not return to the observation once held. This is the movement of a spiral and not of a circle, a return to the root that reaches a place the origin did not occupy.¹ The static cases, read in the light of this movement, are moments in a history through which the observation of each matter is generated and will continue to be generated, and the generativity the paper claims for relation is a generativity in time as much as in structure.

6 OBSERVATION AS ACHIEVEMENT

The term chosen to replace representation must now be held apart from what it replaces and from what it might be mistaken for. Observation, as this account uses the word, names an epistemic relation to a concept that exceeds it. It is achieved through the relations among symbolic expressions, and it does not coincide with the concept it observes. This non-coincidence is the whole point of the choice of word, and a set of alternatives were refused precisely because they efface it. To represent, to capture, to reflect, to mirror, each carries the suggestion that the knowing renders the known without loss, that what is set down is the thing itself in another medium. Observation carries the opposite suggestion. To observe is to view from a position, under conditions, through a medium, and so to view partially and to leave a remainder unobserved.

The word carries one further liability that the account meets directly. In its ordinary use observation names a relation of an observer to an object, the astronomer to the star, the biologist to the cell, and this ordinary use suggests a passive reception of what stands ready to be seen. The process the account names is active and composite. To observe a concept through the relations among its expressions is to translate one expression into the terms of another, to compare their renderings, to hold them in a dialogue that generates a further rendering, to interpret each in the light of the rest, and to align their structures where they meet. Observation, in this account, is the name for this whole generative and relational labor, and the word is to be read as compressing that labor into a single term. The account accordingly favors the compound generative observation where the active sense must be kept in view, so that the passivity the

¹The formal structure of this return, developed through the geometry of holonomy and the sublimation proper to a generative cycle, is treated in the author's *The Sustainability of Intimacy* [7].

bare word suggests is held off by the qualifier.

This liability of the word is itself an instance of the account's central claim, and the account owns it as such. The term observation is a symbolic expression of a concept, and by the Observation Principle it renders a partial aspect of that concept and leaves a remainder. It renders the aspect of viewing under conditions and with a remainder, which is the aspect the account most needs, and it forgoes the aspects of translation, dialogue, and generation that the alternatives the reviewer of such an account might propose, disclosure, understanding, recognition, would render in their turn while forgoing what observation retains. No one of these words completes the concept the account is reaching for. The concept becomes observable only through the relations among them, and the reader is asked to observe it there, in the relation of observation to translation and dialogue and generation and disclosure, and not to rest in any single term. That the account's own central term stands in need of this treatment is not an embarrassment to it. It is the account exemplifying, in the choice of its own vocabulary, the limitation of symbolization it describes, and it is the plainest available demonstration that the account holds of itself what it holds of all knowing.

From this the cardinal distinction of the section follows. The observed is not the real. What the relations among expressions afford is an observation of the concept, and the concept, and beyond it whatever region of reality the concept concerns, exceeds the observation. To take the observed for the real is to repeat, at the level of the enlarged relational access, the error the schema committed at the level of the single symbol, the error of mistaking an adequate-seeming rendering for the matter rendered. The account guards against this by insisting that observation is an epistemic achievement that stands short of ontological identity. It is something won, under conditions, by the labor of relating expressions, and what is won is a view and not a possession of the thing.

Observation is an epistemic achievement, and it stands short of ontological identity. It is won through the relations among symbolic expressions, under historical and symbolic conditions, and it affords a partial view of a concept that exceeds it, and it stops short of a possession of the concept itself.

A consequence of this that the account accepts without softening is that an observation may be alienated or insufficient. It may render an aspect in a way that distorts the concept, it may privilege one expression and let its selections govern the whole, it may carry into the observation the compressions and the exclusions and the relations of power that inhere in its symbolic means. That an observation is achieved does not certify that it is adequate, and the account of alienation in a later section will show how the symbolic means through which observation proceeds can bend the observation to interests the observer does not avow. To hold that observation is an achievement is therefore not to celebrate it. It is to locate it as a fallible act performed under conditions, and to keep open, as a permanent possibility, that a given observation misconceives what it observes.

The humility this enforces is not a rhetorical modesty added to the account from without. It follows from the structure the account describes. If a concept becomes observable only through the relations among its expressions, and if those expressions are always finite in number and partial in reach, then no state of inquiry commands all the relations that would be required to observe the concept without remainder. There is always a further expression, a further relation, a further aspect not yet brought into view. The incompleteness is not a defect of the present state of knowledge that a future state will repair. It is a feature of the relation between concept and symbolization as such, and it is what the third clause of the Observation Principle records. The account that follows builds on this humility and makes it load-bearing, for it is precisely the

permanent incompleteness of observation that makes interdisciplinarity necessary, dialogue generative, and truth a matter of historical enrichment that stays open to further enrichment.

7 INTERDISCIPLINARITY AS AN ONTOLOGICAL CONSEQUENCE

The first consequence of the account overturns the standing understanding of what it is to cross disciplines. On the standing understanding, interdisciplinarity is a methodology, a technique adopted for the sake of a better explanation when a problem outruns the reach of one field. The disciplines are treated as reservoirs of instrument and result, and they are combined as tools are combined, because the job at hand needs more than one. On this understanding the combination is contingent. A problem simple enough to fall within one field would need no crossing, and the crossing draws its justification from the difficulty of the case, and it appeals to nothing in the nature of what is known. The account developed here reaches the opposite conclusion. The crossing of disciplines is required by the mode of being of concepts, and it stands therefore as an ontological consequence, with the office of a methodological convenience falling away.

The argument is short once the Observation Principle is in place, and it proceeds in four steps that are worth setting out in order, since the conclusion has force only when the intermediate steps are seen to carry it. The first step fixes what a discipline is. Each discipline is a symbolic system, rendering its objects in a vocabulary, a formalism, a set of admissible operations, and in doing so it observes an aspect of them and leaves other aspects unobserved. The second step follows from the mode of being of concepts. A concept that several disciplines concern is exhausted by no one of their renderings, and each discipline furnishes one partial and situated expression of it. The third step applies the Observation Principle to this plurality of expressions. Since a concept becomes observable only through the relations among several symbolic expressions of it, and since the several disciplines furnish exactly such a plurality of expressions, the observation of the concept becomes available through the relations among their renderings and through nothing that lies within any one of them. The fourth step draws the conclusion. The crossing of disciplines is the setting into relation of these several disciplinary expressions, and it is therefore the very operation through which the concept is observed. The chain runs from the concept, through its several disciplinary expressions, through the relational observation these afford, to the crossing of disciplines that carries out that observation, and each link is required for the next.

The conclusion holds with a strength the intermediate steps make plain. No enrichment of a single discipline reaches the observation, because the single discipline, however refined, remains one symbolic system and renders one aspect. The crossing of disciplines furnishes the condition under which the concept becomes observable at all, and it does the work of observation itself, where a reading that stopped at the difficulty of problems would cast the crossing as a mere remedy for complexity.

From this the standing understanding undergoes a correction in its terms. To cross disciplines is not to integrate them, if integration names the merging of their renderings into a single enlarged rendering that would supersede them. Such a merger would be one more symbolic system, one more partial expression, and it would stand in need of relation to others exactly as its components did. The crossing affords observation precisely by holding the renderings in relation without collapsing them, so that the aspect each renders remains available and the concept is observed in the play among them. What crossing produces is observation, and not a super-discipline that would end the need for crossing.

Interdisciplinarity is an ontological consequence of the relational mode of being of concepts. Since each discipline is a symbolic system that renders one aspect of a concept, and since a concept becomes observable only through the relations among several such renderings, the crossing of disciplines is the condition under which a concept is observed, and not a technique adopted for the difficulty of a case. Its work is observation and not integration, for it holds the renderings in relation without merging them into a further single system.

The correction can be shown on a pair of cases. When a political economy and a psychoanalysis are brought to bear on a single concept, the concern that structures a cultural form, say, the older understanding reads the psychoanalysis as a supplement that fills what the political economy omits, and the political economy as a supplement that grounds what the psychoanalysis leaves suspended. Each is made to complete the other, and the ideal at the horizon is a single account in which neither omits nor suspends. The present account reads the same encounter differently. The psychoanalysis does not complete the political economy and the political economy does not complete the psychoanalysis. The two render different aspects of a concept that exceeds both, and their relation affords an observation of that concept which neither affords alone. The physics and the economics of a shared object, the psychology and the anthropology of a shared practice, stand in the same case. They stand as partial observations whose relation is the site at which the concept they jointly concern becomes observable, holding the place that a contest of rivals or a sum of fragments would occupy on other readings, and the relation generates that observation and does not merely connect two findings already complete. The generativity is the whole of the point. Were the relation only a link between two settled results, the crossing would add nothing to the knowing of either, and the observation it affords would already be contained in the disciplines it joins. The relation instead brings into view a concept that neither discipline held on its own, and the crossing is productive of observation for exactly this reason.

This is, in the terms of the framework, the deepest reason that inquiry has come to cross its disciplinary bounds, and it is a reason that the idiom of complexity conceals. The objects of present inquiry are indeed complex, and the complexity is not the ground. The ground is that the concepts through which any object is known have a relational mode of being, so that the crossing of the symbolic systems in which they are rendered furnishes a condition of observation. Interdisciplinarity, understood in this way, ceases to be a policy that inquiry might adopt or decline and becomes a consequence that the nature of concepts imposes.

8 THE ALIENATION PROPER TO SYMBOLIZATION

The account has held that every symbolization renders a partial aspect and leaves a remainder. It is worth stating why this is so, for the reason lies in a structure that belongs to symbolization as such, and a better symbolization would leave that structure in place. A prior study in this framework developed the alienation of the structure of desire, the rerouting by capital of the mediation through which drive is structured. The present section develops a formally kindred point at the level of the concept. Where the prior study followed an alienation worked upon desire from without, this one follows an alienation that inheres in the act of naming itself, and the kinship between the two is that in each a generative movement is bent by the form through which it is made to pass.

To symbolize a concept is to perform several operations at once, and each of them incurs a loss. Symbolization selects, for it renders some aspects of the concept and passes over others, and the selection is governed by the purposes and the capacities of the symbolic system, so that

what falls outside its purposes falls outside its rendering. Symbolization compresses, for it sets the concept down in a finite means, a word, a formula, a notation, and the finitude of the means cannot hold the concept without reduction. Symbolization situates, for it renders the concept from within a context, a language with its history, a discipline with its commitments, and the rendering carries the marks of that context into itself. Symbolization inherits a history, for the means it employs arrived with sediments of prior use that bend the rendering toward what the means has been used to say. And symbolization carries relations of power, for the means through which a concept is rendered are not neutral, and the interests served by a vocabulary enter the rendering as a selection that is not avowed as such.

From these operations it follows that naming loses something of necessity. The loss is not the mark of a poor name that a better name would avoid. Every name selects and compresses and situates, and so every name renders an aspect and forgoes the rest. This is the sense in which symbolization alienates. It sets the concept over against itself in a partial form, a form that presents itself as the concept while rendering only an aspect of it, and it is in the gap between the aspect rendered and the concept exceeded that the alienation lies. The alienation is not to be lamented and not to be escaped. It is the condition of there being any symbolization at all, since a symbolization that selected nothing and compressed nothing and situated itself nowhere would amount to a second copy of the concept and would forfeit the character of a symbolization, and no such copy is available to finite means.

The consequence for the account is exact. If every symbolization alienates in this structural sense, then no single symbolization can be trusted to deliver the concept, and the observation of the concept must proceed by holding several alienated renderings in relation, so that the selection of one is checked against the selection of another, the compression of one supplied by what another retains, the situation of one relativized by the situation of another. The relations among expressions do not undo the alienation proper to each. They set the alienations of several expressions against one another, and it is in this setting-against that observation is won. The alienation that inheres in every naming thus furnishes the very reason the account requires a plurality of expressions and the relations among them, and it becomes the ground of the account's method.

9 DIALOGUE AS AN EPISTEMIC NECESSITY

The second consequence concerns dialogue, and it reaches a domain that at first appears remote from an epistemology, the domain of philosophical education. The account holds that dialogue is an epistemic necessity, the relational process through which concepts become progressively observable, and that this holds the reason philosophical education has taken a dialogical form across its history. The claim is developed first in general and then through the case of Socratic teaching, which it reinterprets.

Dialogue is ordinarily understood as an exchange between subjects. On one account it exchanges opinions, each party stating a view and receiving another in return. On a second account it trains a faculty, the give and take sharpening the critical powers of those who engage in it. Both accounts are true as far as they reach, and both stop short of what the present framework discloses. For a dialogue is a meeting of symbolic systems. Each party brings a rendering of the matter under discussion, a rendering shaped by a history, a vocabulary, a set of commitments, and the dialogue sets these renderings into relation. When one party offers a definition and another a counterexample, when the counterexample forces a revised definition and the revision draws a new question, the movement accomplishes the construction, in real time, of relations among symbolic expressions of a concept, and by the Observation Principle

it is precisely through such relations that the concept becomes observable. The exchange of views proceeds within this construction as its surface, while the construction of relations is its work. Dialogue generates observation because it generates the relations in which observation consists.

Dialogue is the relational process through which concepts become progressively observable, the setting into relation of the several symbolic expressions that several subjects bring. It carries the communication between subjects as its outward form and performs, beneath that form, the construction of the relations in which a concept, exhausted by none of the expressions, comes into view.

This reinterprets the Socratic form of teaching. The received reading holds that Socrates poses questions so that the pupil may discover the answer already latent within, and that the dialogue is a scaffold for a recollection or a self-discovery that the pupil performs. The present account offers a different reading. What Socrates does, through the sequence of definition, counter-instance, and revised definition, is to alter the relations among the symbolic expressions of a concept. A definition of courage is offered, an instance is produced that the definition cannot hold, a revised definition is framed to meet the instance, and a further instance unsettles the revision. At no point is the concept set down in an adequate expression, and this incompleteness is the form of the proceeding itself. The proceeding does not converge on a definition. It builds the relations among successive partial expressions through which the concept, courage or justice or piety, becomes observable to those who follow the movement. The Socratic dialogue leaves no doctrine because its work was never the delivery of a doctrine. Its work was the generation of the relations in which a concept is observed, and that work is recorded in the dialogue itself.

The contrast with the lecture makes the point sharp. A lecture transmits a symbolic expression from one who holds it to those who receive it, and within its own terms it can transmit knowledge already won. What a lecture cannot do is generate the relations among expressions in which new observation consists, for it moves in one direction and sets one rendering before its hearers, and it leaves the several renderings unset into relation. A dialogue sets the expression of one party against the expression of another and generates from their relation an observation that neither party held at the outset. The lecture can deliver an observation already made. The dialogue can generate an observation not yet made. This is the difference between transmitting knowledge and generating it, and it is the reason philosophical education, whose matter is concepts of a relational mode of being, has found the dialogue indispensable where the transmission of settled results would have sufficed for a matter of another kind.

The reading extends the account of interdisciplinarity into the space between persons. A discipline is a symbolic system, and the crossing of disciplines affords the observation of a concept several disciplines concern. A person, too, is the bearer of a symbolic system, a rendering of the world shaped by an experience, a history, a language, a culture that no other person exactly shares. The dialogue between persons is therefore a crossing of symbolic systems in the same sense that interdisciplinary inquiry is, differing in that the systems crossed are borne by minds where the systems of interdisciplinary inquiry are codified in fields. What the crossing affords is the same in both cases. It is observation, won through the relations among partial renderings of a concept that exceeds them all. The framework thereby joins interdisciplinary inquiry and dialogical education under a single principle, and gives to the ancient practice of teaching through dialogue a ground in the mode of being of what is taught. If the object of philosophical inquiry is relational, then the form suited to it is the dialogue that generates the relations in which a concept comes to be observed, and the monologue that delivers a finished

result reaches only what has already been observed.

10 TRUTH AS HISTORICAL GENERATION

The third consequence concerns truth, and it is developed in the register of dialectical materialism, for the movement the account ascribes to truth is the movement of material and relational conditions in their dialectical development. If a concept becomes observable only through the relations among its symbolic expressions, and if those expressions and their relations are furnished, revised, and displaced by the historical development of the conditions under which inquiry proceeds, then the observation of a concept is carried by that development, and truth, understood as the state of observation reached, moves with it. Truth so understood is not a static object awaiting discovery. It is a becoming, generated in the dialectical movement of the conditions that furnish the expressions and the relations through which concepts are observed.

The point must be stated with care to avoid a misreading. To say that truth is historically generated is not to say that truth changes in the sense that what was true becomes false at the turn of an age. It is to say that the observation of a concept is enriched as history furnishes new expressions and new relations, so that the concept comes into view more fully, from more sides, under more of its aspects. The infinite observed through the potential infinity of a process, and later through the completed infinities of set theory, and later again through the relations these bear to the vanishing quantities of the calculus, is not a different infinite at each stage. It is the same matter observed through an accumulating structure of expressions and relations, and the truth concerning it is generated as that structure grows. History does not overturn observation. It enriches it, and the enrichment is the generation of truth.

This development is dialectical and material in a precise sense. The symbolic expressions through which concepts are observed do not arise from a free play of ideas. They arise from the conditions of a form of life, its practices, its instruments, its relations of production and reproduction, and they develop as those conditions develop, through the contradictions the conditions generate and the resolutions those contradictions find. A new mathematics, a new science, a new vocabulary of the self arrives when the conditions of a form of life make it available and press it into being, and it brings new expressions and new relations through which concepts are observed anew. The generation of truth is thus carried by a movement that is material in its ground and dialectical in its form, and this is why the account renders the historicity of truth in the terms of dialectical materialism, where a history of ideas moving under its own power would miss the material ground.

From this a governing thesis follows, and it concerns the office of theory in relation to a history that has no predetermined end. The account has refused, throughout, the supposition that a matter can be set down in an adequate and final expression. Applied to history, the refusal becomes a refusal of teleology, of the supposition that history moves toward an end already written, which a theory might read off and announce. If the observation of every concept is incomplete and open to historical enrichment, then the concept of a good arrangement of common life is incomplete and open in the same way, and no theory commands the final expression of it. Material conditions constrain the forms that common life can take without determining which form it takes, so that history has direction and lacks a script, has constraint and lacks a predetermined close. The office of a theory that grasps this lies in the discernment of what history is generating and the keeping open of that generation, and it holds the declaration of where history ends in abeyance. The following box states this office and the truth and the education and the politics that follow from it.

Truth moves with the dialectical development of material and relational conditions. It is a becoming, enriched as history furnishes new expressions and new relations through which a concept is observed, and it holds none of the fixity of an object awaiting discovery. From this a single office of theory follows, displayed here in the three registers it governs.

Of truth. What matters most is the keeping open of history's power to go on generating answers, beyond the delivery of any settled answer.

Of education. What a generative education generates is the capacity to go on generating knowledge, beyond any body of knowledge it imparts.

Of politics. A genuinely democratic arrangement functions and, beyond functioning, retains the power to reconstitute itself.

History has direction and no predetermined end. The highest office of theory is therefore the discernment of what history is generating and the keeping open of that generation, and it leaves the declaration of where history ends aside. A theory that closes history with an answer arrests the generation it claims to grasp. A good theory does not close history with an answer; it opens history with a better question.

To change the world is not to write its ending in advance, but to enable it to go on creating its own future.

The closing proposition of the box stands in deliberate relation to the eleventh of the theses on Feuerbach, which set against the interpretation of the world the task of changing it. The account developed here carries that task one step further. To change the world, on the present understanding, is not to substitute one finished interpretation for another and inscribe a new ending in place of the old. It is to enable the world to go on generating its own future, to preserve and enlarge the power of common life to reconstitute the conditions of common life. The revolution so understood takes the form of a generative capacity, and the theory that serves it serves through the keeping alive of that capacity, where a theory aimed at a terminus would write the close it should leave open. This is the sense in which the account rejects teleology while retaining direction, and it is the sense in which the office of theory is generative in its form.

11 THE GENERATIVITY OF THEORY

The account must now be turned upon itself, for it makes a claim about theories, and it is a theory. If truth is generated in history and no expression is final, then a theory that declares itself complete stands in contradiction with the very account of truth it may otherwise share. The contradiction is performative in kind, and it arises in the performance of the assertion while the form of the assertion stays intact. Such a theory may assert in its content that the world is in movement and that knowledge is unfinished, and it belies the assertion in its posture, presenting itself as the finished expression that the movement of knowledge was said to preclude. Many theories carry this contradiction unremarked. They hold that the world develops and that their own account of it is settled, that inquiry is unending and that their statement of its results is the end. The present account cannot carry the contradiction, because the contradiction is precisely what its account of truth forbids, and so it is required, on pain of self-refutation, to hold itself open in the manner it ascribes to all knowing.

The framework accordingly holds itself to stand within the history it theorizes, and it claims no station above that history. It did not arise as the finished insight of a single mind survey-

ing history from without. It arose, and continues to arise, in a movement of relation, from the author's inquiry, from the dialogue with a body of prior thought that includes the analyses of political economy and the vocabularies of psychoanalysis, from the continuing correspondence with contemporary scholars of generative justice, from the responses of readers and interlocutors, and from exchanges as ordinary as the ones in which particular formulations of it were first sharpened. To ask who is the author of a theory so arising is to receive, on this account, an answer that the ordinary attribution obscures. The theory is co-generated. It arises as the generation of a long relational network, and its propositions clarify through relation, each drawn from the movement of many exchanges and none issuing from a single origin.

This places theory within a category the framework has developed elsewhere. A theory that is co-generated in a relational network is a form of relational wealth, generated in common and belonging to the movement of relation that generates it, and a proprietor who would hold it as an owner holds a thing has no title to it. The point is consistent with the framework's account of production and reproduction. To produce an answer is an act that occurs once and is finished. To generate the capacity to go on producing answers is an act of reproduction, a keeping-alive of a generative power, and a theory that understands itself rightly aims at the second of these, the keeping-alive, and lets the finished answer fall where it may. It aims to participate in the reproduction of the conditions under which common inquiry continues, and not to freeze the history of inquiry at the moment of its own statement.

From this an ethics of theory can be stated, and it is the ethical counterpart of the epistemology the paper has developed. A theory that proclaims its own completion arrests the generation it describes, and in arresting it commits the performative contradiction set out above. A generative theory must therefore consent to be altered by the history, the practice, and the others it meets, on pain of ceasing to be generative. The consent is not a modesty appended to the theory. It is a condition of the theory's consistency with its own content, and it is the discipline that keeps the theory from installing itself as a new guarantee in the place of the guarantees the framework was developed to unsettle. A theory is not a new divinity and must not become one. It is one condition, among others, under which a community goes on thinking, practicing, and revising the terms of its own life. The framework holds itself to this discipline, and it is in holding itself to it that the framework remains, in its own conduct and not only in its assertions, a generative theory.

12 THE THREE REGISTERS AND AN OPEN PROBLEM

The account has used, throughout, a term it has not fully secured. It has spoken of a concept that stands prior to its symbolizations and becomes observable through the relations among them, and it has distinguished this concept both from the symbols that render it and from the reality it concerns. Three registers have thus been in play, reality, concept, and symbol, and the relations among them have been left partly undetermined. The determination is deliberately withheld, for the relation among the three registers is a problem the account does not consider settled, and the manner of its eventual settlement would fix the final form of the epistemology. This section states the problem and the paths open through it, and it declines, in keeping with the account of theory just given, to close what the present state of inquiry does not close.

The problem can be posed as a question about the middle register. Symbol is clear enough in its office, the concrete means, linguistic, mathematical, pictorial, institutional, through which a concept is rendered. Reality is the region of what is, whatever its independence from the concepts through which it is known. The concept stands between them, and its status is what the account has left open. Three construals present themselves, and each yields a different

epistemology.

On the first construal, the realist one, the concept is a structure independent of the human activity that observes it, a structure that inquiry approaches through the relations among its expressions without constituting. On this construal the Observation Principle carries a metaphysical weight. The observation is an observation of something that stands on its own, and the incompleteness of observation is the incompleteness of a finite approach to a mind-independent structure. The construal secures the objectivity of what is observed, and it inherits the standing difficulty of saying how a concept that stands wholly prior to symbolization is reached through symbolization at all, and how the pre-symbolic is characterized except through the symbols it is said to precede.

On the second construal, the generative one, the concept emerges from the relations among symbolic expressions and emerges from them, so that the concept is generated in the symbolic activity and stabilized as that activity settles into recurring relations. This construal sits closest to the framework's general commitments, for it treats the concept as it treats other relational realities, as generated in relation and drawn forth in the activity of expression. Its difficulty is the one the third section labored to avert, the slide toward a position on which the concept is dissolved into symbolic activity and loses the purchase that let the infinite and justice behave as matters exceeding any one of their expressions. The construal must show how a concept generated in relation can nonetheless exceed each of its expressions, and the account has gestured at this without securing it.

On the third construal, the suspensive one, the question of the concept's status is set aside, and the account confines itself to what can be said of observation without pronouncing on what is observed. On this construal the epistemology makes no claim about whether the concept stands prior to its expressions or emerges from them, and it holds only that observation proceeds through the relations among expressions and is always incomplete. The construal is the most cautious and the most defensible on present resources, and it purchases its safety by forgoing the ontological reach that the framework's extension from being to knowing seemed to promise, leaving the relation of knowing to being unstated where the framework aimed to state it.

The account does not choose among the three. It holds that the choice would fix the final form of the generative relational epistemology, that the resources to make it well are not yet in hand, and that to make it prematurely would install one construal as a guarantee in the manner the account has been at pains to refuse. The relation among reality, concept, and symbol is left, therefore, as the open problem on which the further development of the epistemology turns. This is an application of the account and not an evasion of it. A theory that has argued that observation is incomplete and that truth is generated in history is required to leave open the question its present state cannot close, and to mark it as the site at which the dialogue, the practice, and the history that generate the framework will continue to work.

13 CONCLUSION

The paper has carried the generative relational framework from the register of being into the register of knowing. Where the framework had shown a shared world to be generated in the bond between subjects, the paper has shown knowing to be relational in a kindred sense. It began from a supposition that traditional epistemology leaves unexamined, that a concept can be adequately carried by a single symbolic system, and it traced that supposition through the analytic search for definition, the structuralist reduction to position within a system, and the project of knowledge representation. Against the supposition it developed the relational mode

of being of concepts. A concept is exhausted by no symbolic system and becomes observable only through the relations among several partial and situated expressions of it.

From this the paper drew a term to stand in the place of representation. Knowing is generative observation, an epistemic achievement that stands short of ontological identity, historically situated and symbolically mediated and for that reason incomplete, and open, for the same reason, to the possibility that any given observation is alienated or insufficient. Three consequences were drawn. Interdisciplinarity was shown to be an ontological consequence of the relational mode of being of concepts, since that mode makes the crossing of symbolic systems the condition under which a concept is observed. Dialogue was shown to be an epistemic necessity, the relational process through which concepts become observable, a result that reinterpreted the Socratic form of philosophical education as the generation of relations among expressions, where the received reading had cast it as the delivery of a latent answer. And truth was shown to be historically generated, a becoming carried by the dialectical development of material and relational conditions, whose enrichment across history is the generation of truth.

The paper then turned the account upon itself. A theory that claims completion arrests the generation it describes and falls into performative contradiction with its own account of truth. The framework accordingly holds itself to stand within the history it theorizes, co-generated in a relational network of inquiry, prior thought, contemporary dialogue, and reception, and belonging to the movement that generates it, with no title vested in a proprietor. From this an ethics of theory followed, that a generative theory must consent to be altered by the history, the practice, and the others it meets, and must decline to install itself as a new guarantee in the place of the guarantees the framework was developed to unsettle.

The analysis advances no final synthesis, and it closes, in the manner its own account of theory requires, on the questions it has made it possible to ask. Whether the concept stands prior to its symbolizations or is generated in the relations among them, and how, on either construal, it comes to exceed each of its expressions. What relation binds the three registers of reality, concept, and symbol, on whose settlement the final form of the epistemology turns. How an inquiry, a pedagogy, or a common life might be arranged so that the crossing of symbolic systems and the generation of observation are sustained and kept from foreclosure. These are posed in the manner of a generative pedagogy, which sets the problem before those who hold it in view and does not dictate its solution. Consistent with the account it has developed, the paper offers the conditions under which the inquiry may continue, and it withholds the ending of the inquiry, and it holds, of its own propositions as of all others, that what matters most is the keeping open of the power to go on generating an answer, beyond the delivery of any settled one.

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