against the given in action by transforming itself according to a concept that negates all particular, manifest, and given contents.

Kant's transcendental turn was a major assault on the given. Before Kant, the sensory world—sensory data—was taken to be the locus of structure and categorial forms, while mind was a block of wax or a blank slate readily admitting these givens. With Kant's transcendental turn, the situation was reversed. The data became the blank slate and mind became the structuring or configuring point. But Hegel took Kant's assault on data one step further by arguing that, in so far as mind is an object of its structuring concept and in so far as it has a history, it must also *in practice* remove the givens—that is, the supposed completed totalities—of its history. Hegel's transcendental turn is therefore not just about the formal autonomy of thought, but its concrete objective historical freedom. How this relates to what Wilfred Sellars calls the 'myth of the given' will be discussed in subsequent chapters, in various guises.⁴⁷

Geist's history is a dynamic between its positive and negative conceptions. Only by acknowledging itself as simultaneously a positive and negative configuring factor, both that which provides freedom and that which hinders it, can spirit overcome itself and exercise the freedom of selfrealization. If it is to expand its capacity to modify itself so as to maximize its functional autonomy, intelligence must treat the conditions required for its realization—be they natural or normative—as both negative and positive constraints: negative in so far as they must be overcome in order to increase autonomy over the conditions of realization, and positive in so far as this autonomy cannot be increased unless these conditions qua conditions of enablement are identified and harnessed to effect transformation. It is within this twofold approach to the conditions of realization that the attitude of intelligence to its natural history is revealed. In order for intelligence to become an artefact of its own concept and to progress or transform itself qualitatively according to this concept, it must regard its natural conditions of realization as impediments to be overcome. But in order to overcome

⁴⁷ For a succinct and lucid exposition of this myth, see J.R. O'Shea, Wilfrid Sellars: Naturalism with a Normative Turn (Cambridge: Polity Press, 2007), 1.

them, it must identify its natural constraints so as to modify or replace them with alternative realizers more in accord with its concept of itself.

Even though intelligence has a natural history, short of reorienting, repurposing, and reengineering this natural history, it ceases to be intelligent. The augmentation of intelligence or the enablement of geist remains a highly implausible dream if it does not scrutinize its natural history, differentiating its positive and negative constraints. But an intelligence that does not develop its own normative conception as to how it ought to be—a move that inevitably culminates in reengineering and revising its natural constitution, its multiple realization—is even more implausible. Reconstituting our nature demands that we do not forget our natural history or conditions of embodiment, since 'how we ought to be' cannot disregard the structural-material constraints of realization. But 'not forgetting our natural history' does not entail foregoing the reconstitution of our nature, unless we subscribe to a regime of final causes in nature according to which the causes of how things are and the reasons for how things ought to be are seamlessly sutured. Furthermore, natural constraints are only one set of constraints among others (social, linguistic, economic, etc.).

Intelligence commandeers its given nature by way of the history of its own obligations and demands, for the history of intelligence only begins in earnest with the cumulative reworkings of its given constitution, progressively breaking away from the given in all its manifestations. When it comes to geist, it is more apt to speak in the plural, to speak of histories or chronicles of reconstitutions rather than of a history of constitution. For intelligence, reconstitution is adaptation to new regimes of designed purposes or ends that are themselves open to reassessment and revision. In fact, the fallibility of such ends impels the self-correcting attitude of intelligence. Mind's realization amounts to the modification of its conditions of realization. This is what the function of functionalism of mind implies. Once mind is realized as a configuring factor, the path to a complete functional analysis of the mind is unavoidable; and this path leads to the complete reorganization of mind, its systematic artificialization.

Artificiality is the reality of mind. Mind has never had and will never have a given nature. It becomes mind by positing itself as the artefact of

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its own concept. By realizing itself as the artefact of its own concept, it becomes able to transform itself according to its own necessary concept by first identifying, and then replacing or modifying, its conditions of realization, disabling and enabling constraints. Mind is the craft of applying itself to itself. The history of mind is therefore quite starkly the history of artificialization. Anyone and anything caught up in this history is predisposed to thoroughgoing reconstitution. Every ineffable will be theoretically disenchanted and every sacred will be practically desanctified.

A NOTE ON THEORY, MIND'S STRUCTURING FUNCTION, AND RATIOCINATING POWERS

Since the term 'theory' is often loosely employed, to the point where 'theoretical' has become a vague if not vacuous qualifier, it is necessary to provide a minimal criterion for what is meant here by theory or theoreticity as intrinsically associated with the concept and the idea of mind, and more importantly the ineliminable correlation between intelligence and the intelligible. A theoretical framework is a triple $\langle L, S, U \rangle$, where:

- L is language for theory, i.e., language with explicit formal dimensions and semantic richness and transparency.
- S is structure as associated with the mind as the factor of conceptualization or structuration. Structure is a well-differentiated and ordered n-ary relation $R(\langle R.lexicals, R.names, R.ends, R.entities, R.aspects, R.processes, R.domains \rangle)$ and operations $O(\langle O.lexicals, O.names, O.ends, O.entities, O.aspects, O.processes, O.domains \rangle)$ between multifaceted aspects, elements, or parts of an entity, domain or process such that:

R.lexicals assigns a set of lexicals l to each relation. Lexicals denote properties of relations or entities and can be seen as another tuple $\langle l, l.names, l.type \rangle$ where, for example, l.type assigns a type to each lexical.

R.entities assigns a set of entities to each relation.

R.ends assigns ends (i.e., a target entity, aspect, etc.) to each relation.

Etc.

The n-ary relational-operational framework (how distinct entities, aspects, processes, etc. hang together in the widest sense) then would also require generalization hierarchies over entities, aspects, processes, and domains. For example, the generalization of a set of processes P can be denoted as $P.gen \subseteq P \times P$. This would allow us to talk about taxonomic relations between two or more processes. If processes p_1 and p_2 are child processes then they inherit the lexicals, and the connections between associated processes, etc. of their parent processes.

With the introduction of structure, we no longer talk about *things* in the world, but only structures (of the mind) or objective facts about the world.⁴⁸

 U is a universe of discourse or the dimension of comprehensive data provided for the purpose of conceptualization or explanation.
 For example, integers or biological species can be posited as universes of discourse.⁴⁹

Theory becomes absolutely systematic when L is taken to be language and logoi, namely, logic and mathematics. In addition to the traditional Platonic logoi—as they will be introduced in the next chapter—we should also include computation, specifically in the manner defined by today's theoretical computer science as distinct from (but in fundamental correspondence with)

⁴⁸ See for example, J. Ladyman and D. Ross, *Every Thing Must Go* (Oxford: Oxford University Press, 2009).

⁴⁹ The term 'universe of discourse' originates from Augustus De Morgan's phrase universe of a proposition specifically meaning 'the whole of some definite category of things which are under discussion' but not at all 'the totality of all conceivable objects of any kind whatsoever'. See W. and M. Kneale, *The Development of Logic* (Oxford: Clarendon Press, 1962), 408.

logic and mathematics, and as the generative framework of language in its syntactic and semantic breadth. In this sense, computation is what removes the hard distinction between language and logoi. Yet for the construction of an absolutely systematic theory, the most important modification is to take U to be the unrestricted universe of discourse wherein one can frame theoretical claims (It is the case that...) with no a priori limit on the scope of such a universe. In contrast to a restricted universe of discourse (e.g., integers or even all numbers), the unrestricted universe of discourse is characterized by the absolute openness of its scope with regard to its accommodation of the data provided by language and logoi and its permitting of the elaboration of all interdependencies, connections, and distinctions between various thematic components—hence the possibility of systematization.

It is crucial not to mistake what we call data for sense data or sensory givens. The concept of data under consideration in this book is strictly associated with mind's structuring function, and will be elaborated in the following chapters under two fundamental classes of data: the axiomatic class (or the formal givens) and the truth-candidacy class, which generates a different kind of structure than that of the axiomatic. As we shall see in the final chapter, the absolutely systematic theory of intelligence, or the programmatic conception of philosophy whose central concern is the craft of the ultimate form of intelligence, works primarily with data as truth-candidates, and only secondarily in the context of specialized domains with axiomatic data.

Following Puntel, the triple can be abbreviated as $\langle S,U\rangle$, 50 such that S is bought up by the combination of all possible syntactic and semantic structuring abilities of the mind. Defining theory as a tuple means that the elements should be considered in terms of the totality of their relations. The well-orderedness of the tuple implies that all the three elements L, S, and U fit together. For this reason, any systematic theory should make explicit how such elements hang together within it. This articulation should be regarded as an essential aspect of the presentation of the theory itself

⁵⁰ Puntel, Structure and Being, 45.

rather than as a matter of metatheoretical consideration or reflection on the presented theory.

Since the explicitation of the relations between structure and the universe of discourse is in reality the articulation of the connections between the logical function of the mind as a structuring factor and the data under consideration provided by the logoi or the mind's ratiocinating powers, in elaborating how its S and U fit together, any genuinely systematic theory should also elaborate in what manner it is an extension of a philosophy of mind. By philosophy of mind, I specifically refer to how the question of mind is framed within German Idealism, where it refers to the concrete movement between the concept of mind as the combination of an existing physical embodiment and a necessary logical function, and the idea of mind as the full realization of such a concept and its corresponding object. In so far as without the logoi there is no intelligibility,⁵¹ without the intelligible the question of framing intelligence is an empty thought. By elaborating theory in this way, we can drop the metaphysically slippery copula of mind and world, and instead talk about theory and object, which belongs to a family of formal fundamental dualities (not dualisms) such as structure and being (Puntel), being and nonbeing (Plato), or sapience and sentience (Brandom).

SELVES AS FUNCTIONAL ITEMS AS ARTEFACTS OF MIND

The movement or progress of geist represents the construction of complex rational agents through normatively (rather than naturally) evolving forms of self-consciousness. The community of rational agents may draw upon a model of self-consciousness in order to exercise its freedom by first developing a self-conception and then transforming itself in accordance with it. In building upon its conception and instituting its transformative practices, geist qua community of rational agents can then construct superior models of self-consciousness, and can thereby structure different

⁵¹ Cf. Plato's *Phaedo*: 'No worse evil can befall a man than to come to hate logoi', for in that case he will be 'deprived of the truth and knowledge of reality.' (90d67).

kinds of self-conscious selves. But this movement, as argued earlier, depends upon how willing, competent, and systematic geist is in uncovering the order of intelligibilities pertaining to itself and the unrestricted world that is coextensive with it. We might say that the movement of Spirit projects competing models of self and their corresponding modes of awareness.

Earlier we saw that the necessary link between conception and transformation is the key to the freedom of Spirit-'producing its concept out of itself and becoming the being of its own concept'-that is to say, constituting a history for itself rather than a nature. The selves that make up the configuration of geist are essentially rational selves, selves only realized by the formal order of self-consciousness or reason. They are to geist only functional items. Geist's superior modes of integration or cognitive unities are built out of these functional items and their logical roles (for example, the ways in which these selves are collectively organized, how the discursive context of their activities can be enriched, how their cognitive significance can be socially elaborated, and so on). What constitutes apperceptive selves as the functional constituents of geist is the formal social configuration of geist itself-formal in that it is a rulegoverned discursive space or public language. Like an artificial multi-agent system, geist is the configuration—the configuring and the configured—of discursive apperceptive rational or thinking selves. However, this system is structured not by simple communication or social grouping but by a logical or inferential-semantic space. Endowed with qualitative global activities, the multi-agent system is what constitutes and is constituted by various types of interactions between its local components or, in this case, the activities of the thinking self-theoretical and practical cognitions. While geist synthesizes the unity of apperception, it is the integration of apperceiving selves in their recognition of one another that positively modifies the qualitative activities of geist which, in turn, condition more enabled cognitive-practical selves. This framework should be seen firstly as the formal systematicity of recognition—something which, as we shall see, can be couched in purely logical, linguistic, and computational terms. Next it can be viewed as a concrete social project of collective recognition which is the object of theoretical and practical-in the broadest sense of

what theory and practice can be—labour and interventions. Even though the formal social systematicity of mind is not a sufficient means for fulfilling the latter, without an adequate grasp and mobilization of the formal sociality of mind, any concrete endeavour will fail. Within both the formal and concrete social dimensions of mind, no one has ever a mind of their own. Mind is cognitive only in that it is recognitive all the way down—computationally, logically, linguistically, and socially.

To mistake mind for the brain is not only to collapse the formal (i.e., nonsubstantive) distinction between thinking and being, but also to fall into the trap of an incoherent cerebralism for which the mind becomes the given cerebrum of the individual agent. The social manifestation of the demotion of mind to an individual where one can always point to a given cerebrum is what Hegel calls individual, or more precisely individualistic, *stubbornness*, a consciousness 'bogged down' by its own 'servility':

Because not each and every one of the ways in which his natural consciousness was brought to fruition was shaken to the core, he is still attached *in himself* to determinate being. His having a mind of his own is then merely *stubbornness*, a freedom that remains bogged down within the bounds of servility. To the servile consciousness, pure form can as little become the essence as can the pure form when it is taken as extending itself beyond the individual be a universal culturally formative activity, an absolute concept. Rather, the form is a skill which, while it has dominance over some things, has dominance over neither the universal power nor the entire objective essence.⁵²

THE SAPIENCE CONTROVERSY

Humans are functional items of mind. And by human we mean a rational self, a discursive apperceptive intelligence, or a sapient creature. Promoting humans as the constituents of mind always risks triggering bad memories of socioculturally charged human exceptionalism, the legacy of conservative

 $^{52\}quad \text{Hegel, } \textit{Phenomenology of Spirit}, \, \S 196.$

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humanism. But the controversies around human sapience all originate in one way or another from the illicit merger of sapience understood as a formal quality which can encompass any sentience that structurally satisfies its condition of realization, and sapience understood as a substantive quality that ranks a being above other beings. Whereas the former conception of sapience can be adequately understood as a functional diagram or minimal yet revisable description of the capacities necessary for thinking and action, the latter is a concrete account of the human as described by a set of contingent characteristics and abilities. Sapience is not a being; it is a necessary and positively constrained form or Idea in the Hegelian sense of this term. Necessary since, without this form, the recognition of the world and by extension sentient beings or more generally the dimension of intelligibility, is impossible. And positively constrained in so far as its realization rests upon necessary conditions or enabling constraints which are both causal and logical. Sapience is a formal criterion-a sui generis form—and therefore should not be treated as a substantive essence or being. Accordingly, to treat sapience as a species or rank in the order of being is to elide the difference between that which is formal and that which is substantive, thinking and being, reasons and causes. Sapient awareness-which is of the order of self-consciousness or reason-is not sentient consciousness. It is a necessary form for bringing about qualitative change in the structure of sentience by becoming the site of special kinds of logico-computational activities, judgements, inferences, and conceptualizations. Sapience, therefore, marks the ingression of logicoconceptual functions as a new class of broadly regulative functions into sentient activities. In a nutshell, the human as a form only indicates the deep correspondence between intelligence and the intelligible, structure and being: the fact that intelligence without intelligibility in the broadest sense is merely an ideological fixation, and that there is no way to speak of intelligence without the labour of intelligibility. To sidestep the labour of intelligibility in favour of intelligence or nonhuman intelligent behaviours is a sure formula for confounding what is intelligent objectively and what is intelligent subjectively. That is to say, conservative humanism and the anthropomorphization of the universe creep in the moment we dismiss the

form or the idea of the human—or sapience as a set of positive/enabling constraints for thinking and action—as a token for the labour of intelligibility.

As suggested by Peter Wolfendale's phrase 'the reformatting of homo sapiens',⁵³ sapience is a qualitative change in the class and types of activities of sentience brought about by *a qualitatively distinct class of activities*. Any sentience that comes under these activities or functional form will be essentially regulated and reformatted.

Rather than representing a new rank in the order of beings, sapient awareness articulates a constructive principle or a form that discontinues the supremacy of humans as a biological species. It dissolves and assimilates the manifest configuration of the human species-and of any other sentience that falls under it—into the new unities of the impersonal mind. By reformatting sentient consciousness with logico-conceptual functions, sapient awareness weakens the governing role of its material substrate—be it biological or social. It progressively liberates its conditions of realization from its natural constitution. By synthesizing a framework in which it is possible to be at once responsible for thinking something (a judgment) and responsible for doing something (an action), it increases its cognitive, theoretical, and practical freedoms. By rationally evolving into a self capable of treating itself as an artefact—approaching itself as the artefact of its own Concept—it puts forward a concept of sapient agency amenable to the possibility of realization in other artefacts. Far from being an achieved totality, human sapience is what breaks its attachment with any special status or given meaning. It is an artefact that belongs to the history of mind as the history of artificialization. The cognitive exploration of 'what it means to be human' or 'what sapience consists in' takes shape as a systematic exercise in developing the object of an evolving Concept. Succinctly speaking, sapient awareness is a cognitive-practical project through which the realization of the human is rigorously subjected to changes in the content of the concept of the human. Yet in so far as the structure of this concept is formally constituted, and since it describes the human not by recourse to substantive

⁵³ P. Wolfendale, 'The Reformatting of Homo Sapiens', Angelaki 24.2: Alien Vectors (forthcoming, 2019).

essences but in terms of necessary structuring abilities which can be brought about by different sets of material realizers, it expands the prospects of the realization of sapience, extending it to the realm of artefacts as pure objects of craft and artificialization processes. However, in no way does this mean turning artefacts into a repository for the conservation and reproduction of the canonical portrait of the human that belongs to the realm of biology and sociocultural particularism. Sapient awareness is a constructive principle for the production of a self endowed with content-awareness; neither the essentialist identity of this self nor the boundary and the quality of the content-awareness according to which it conceives and transforms itself are fixed. Sapience is a constructible activity, not a structurally fixed entity. From the perspective of this constructibility, the assertion that the sapient is an animal qua sentient is an exercise in prejudiced dogmatism: it places a limit on the possible realizations of the sapient form by limiting it to a particular physical or biological organization.

It is a matter of fact that the currently embodied human is both sapient and sentient, both an artefact of the concept and a biologically embodied animal. But what makes the human human qua sapience is formal and not substantive. This autonomous rule-governed form is not a dimension of the human qua sentient or natural species. The distinction between the sapience of the human (reason) and the sentience of the human (Homo sapiens sapiens) is ultimately the formal distinction between thinking and being. It is the dividing line between formal distinction and substantive indistinction. It follows that not only the current homo sapiens but also any sentience can be a sapient so long as it satisfies the minimum necessary conditions of the formal autonomy of thinking in which our own sentience is caught up. We shall examine these necessary conditions in the following chapters. As humans we look at our animality and say: I see in you the abyss of intelligence, but in me you see nothing. Only to the extent that we are sapients are we critically aware of ourselves as sentient among other sentients, as integrated bundles of rational and nonrational processes. The difference between sapience and sentience is not an essential feature of biological species, nor should it be narrowed down to homo sapiens or the commonsense picture of humans. Of course, one can always object that thinking

is ubiquitous in nature and that ultimately sapience is in fact sentience. For now, Lorenz Puntel's response should suffice to dispel this confusion:

Discussions motivated by the question whether animals (or specific kinds of animals) 'think' (or have minds, etc.) usually have nonsensical aspects. Without a criterion for thinking, it is nonsensical to ask whether or not a given kind of animal thinks. Here, such a criterion is available: the type of 'world' that corresponds to the ontological constitution of a given kind of being. If this 'world (Welt)' is a pure (hence restricted) environment (Umwelt)—only an Umwelt, hence not, unrestrictedly, the Welt—then there is no 'intelligence' in what this book accepts as the genuine sense, because this sense is defined as requiring that the 'worlds' of beings that think be unrestricted (as is the case for human beings). Of course, if one associates a different concept with the term 'thinking,' then some kinds of non-human animals may well 'think.' But then the question is reduced to a purely terminological one.⁵⁴

Everything that Puntel says about thinking can be repeated word for word in reference to mind. The thinking of sapience is defined in terms of its *conceived* world, in that the world of sapience has no restriction whatsoever on what can be asked or thought. The thinking of sapience is coextensive with everything.

To be human is the only way out of being human. An alternative exit—either by unbinding sentience from sapience or by circumventing sapience in favour of a direct engagement with the technological artefact—cannot go beyond the human. Rather it leads to a culture of cognitive pettiness and self-deception that is daily fodder for the most parochial and utilitarian political systems that exist on the planet. In delivering sentience from its so-called sapient yoke, one does not become posthuman, or even animal, but falls back on an ideologically charged 'biological chauvinism'⁵⁵ that

⁵⁴ Puntel, Structure and Being, 276 (emphasis on final sentence mine).

⁵⁵ R. Brandom, *Reason in Philosophy: Animating Ideas* (Cambridge, MA: Harvard University Press, 2009), 148.

sapience ought to overcome, for it is the very idea of humanist conservatism that misrepresents what is accidental and locally contingent as what is necessary and universal. In discarding the human in the hope of an immediate contact with superintelligence or a self-realization of the technological artefact, one either surreptitiously subjects the future to the predetermined goals of conservative humanism, or subscribes to a future that is simply the teleological actualization of final causes and thus a resurrection of the well-worn Aristotelian fusion of reasons and causes. Human sapience is the only project of exit.

We cannot bypass the labour of overcoming the quandaries of humanity by positing a dubious metaphysical alternative to the human as a shortcut to freedom. In doing that, we would simply dissolve the problem rather than solving it. In reality, antihumanist alternatives to the idea of the human ironically end up endorsing the most conservative anthropomorphic traits under the guise of some dogmatic figure of alterity. Inasmuch as such antihumanist alternatives have already foregone the geistig resources necessary to diagnose and suspend the conservative traits or characteristics of the human, they become the servants of that very conservative concept of the human they originally set out to escape.

We as manifest humans must come to terms—psychologically, cognitively, and ethically—with the hard fact of what it means to be human: One cannot have the cake of humanity without eating its consequences. Once we treat ourselves as a species of rights and entitlements, once we say what ought or ought not to be thought or done, the moment we distinguish the order of things and respond to it in accordance with what we think is right, however far from truth it may be, we have committed ourselves to the impersonal order of reason to which sapience belongs—an order that will expunge our manifest self-portrait. ⁵⁶ We have crossed the cognitive Rubicon. In committing to this impersonal order we must realize that what is manifestly human—us as we stand here, now—will be overcome by that very order. Reason is a game in which we are all fleeting players and from

^{&#}x27;One can certainly wager that man would be erased, like a face drawn in sand at the edge of the sea.' M. Foucault, *The Order of Things* (London: Routledge, 2002), 422.

which we cannot defect, so let us play this game well by committing to its interests and its ramifications. As transitory embodiments of sapience, we can only recognize our mixed animality and the fact that what makes us special is the capacity for such recognition—for recognizing that, as sentients, we are absolutely not exceptional—and take the implications of being sapient to their furthest conclusions. Through the growth and maturation of reason, the definition and significance of the human is freed from any purported substantive essence or fixed nature. The formal appellation of 'humanity' becomes a transferable entitlement, a right that can be granted or acquired regardless of any attachment to a specific natural or artificial structure, heritage, or proclivity, since being human is not merely a right that is simply obtained naturally at birth through biological ancestry or inheritance. The title 'human' can be transferred to anything that can graduate into the domain of judgments, anything that satisfies the criteria of minded and minding agency, be it an animal or a machine. The entwinement of the project of human emancipation—both in the sense of the negative freedom from the limitations established in advance or created by ourselves and the positive freedom to do something or become something else—with the artificial prospects of human intelligence is the logical consequence of the human as a transferable right.

RATIONAL INTEGRATION, JUDGEMENT, AND GENERATION OF FURTHER ABILITIES

The kind of self that is required for establishing the necessary link between geist's conception and transformation is defined functionally by its roles in assuming rational responsibility (judging): using its rational unity to treat one set of commitments as reasons for or against other commitments. This is a thinking self, or a discursive apperceptive intelligence: an intelligence that is conscious of its own experiences through the rational unity of self-consciousness, and whose experiences are structured by concepts of mind. Unlike god or other imaginary intelligences, this intelligence has no direct contact with reality other than through its own geistig configuration.

Since thinking selves are a functional item that represents a qualitative set of activities (judgements or reasons), their formal (semantic-pragmatic) and concrete sociality can effect qualitative changes in the structure of geist or in the activities by which these selves identify themselves, individually and collectively. In other words, in its every dimension the collective configuration of thinking selves or rational agents-synchronically in time or diachronically across time—determines the course of the concrete project of self-consciousness. Mind has a configuration-sequences of self-conceptions and self-transformations—which is extended in time. Geistig activities, therefore, are not merely recognitive-cognitive but also recollective-reconstructive. Thinking selves are then not just the locus of judgements afforded by the recognitive dimensions of rational responsibility and authority—that is to say, the capacity to make oneself liable to distinctive kinds of (conceptual) normative appraisals. In addition, they are the locus of recollective-reconstructive judgement—the ability to extend recognitive acknowledgement to the recollections of history. What we are referring to here is geist's ability to be conscious of and to judge its constituted history as represented by the responsibilities and authorities of past judges. Rational selves, then, are also defined by their content-awareness of those activities, judgments, decisions, conflicts, values, and variables that have constituted their history and have led to their current configuration.

In order to have this content-aware experience (erfahrung) of history and to gain epistemic traction on it, geist must be able to represent to itself a reconstruction of its past transformations and their specific realizers (those activities and constraints which have brought those transformations about). Accordingly, the recollective reconstruction of the past history of conceptions and transformations should be understood as an essential feature of the self-related logic of mind whereby the mind not only recognizes its different structural transformations across time as its own unified experience, but also uses this experience to generate new abilities, to correct or rewrite its values and disvalues, and to construct itself differently. For intelligence, then, History is an order of intelligibility and thus a condition of its enablement. Any configuration of Is or thinking selves (any we) is simply a part of this history, not its totality.

What we were is now suspended in what we are, and what will be is suspended in the history of intelligence. To intelligence we are merely a historical intelligibility that enables but does not impede it.

Once the rational self as the basic functional item of geist is constructed, geist is able to conceive a historical concept of itself-a historical unity—and to act on it. This historical unity or integration requires, on one level, the recognitive-cognitive principle of 'the synthesis of an original unity of apperception through rational integration with a model of the synthesis of normative-status-bearing apperceiving selves and their communities by reciprocal recognition'. 57 On another level it entails a recollective-reconstructive principle of 'synthesiz[ing] a rational (including consequences and excluding incompatibles) contemporary unity by integrating the commitments of past judges'.58 Only when rational selves concretely incorporate these two principles into their own conception of what to think and do, are they able to see the truth of themselves as an ongoing history of intelligence, realizing that their freedom lies in the freedom of mind as a historical artefact of its own concept, a necessary link between self-conception and self-transformation that ought to be rendered sufficient. The concept of history then is nothing but a necessary link-a dynamics-between conception and transformation. The concrete actualization of this history, however, is a matter of a thorough recognitivecognitive struggle by rational selves.

By constituting its own history, geist acquires the power of self-cultivation, or the capacity to assess and develop its history via superior modes of self-consciousness which then allow geist to form and carry out more refined and comprehensive conceptions and transformations of itself. To put it differently, the elaboration of history as an emancipatory activity is an outcome of constructing and organizing rational selves incorporated within higher geistig unities through which they can concretely transform themselves.

⁵⁷ See Brandom, Reason in Philosophy, 81.

⁵⁸ Ibid., 86.

HISTORICAL AWARENESS AS AN ESSENTIAL CONSTRUCTIVE AND CRITICAL ABILITY

By providing themselves with descriptions regarding their past transformations, and by putting these descriptions into a form that can be historically expressed and assessed, rational selves can develop adequate theories and practices for reorganizing or transforming themselves. This process is the sociohistorical equivalent of the rational unity of consciousness. Historical consciousness is a distinct kind of consciousness specific to discursive, concept-using, self-conscious creatures able to apply the principle of rational integration to the history of their transformations, giving cognition an explicitly historical role. The agency of rational selves in effecting such a transformation indicates that they have discarded every given in their history, as well as any god or deus ex machina. Agency in its concrete sense is not merely rational autonomy. It is also the realization that anything that appears as an autonomous self-apprehending thing or process without rational agency—be it theological, natural or technological—is a practical given, a precritical adolescent fantasy, a delusion of stubborn and servile consciousness.

Through developing historical consciousness, geist is able to identify negative and positive trends of the past, abandoning the former and cultivating the latter. Therefore, historical consciousness provides thinking selves with a principle of self-cultivation through the assessment and correction of the sequences of their self-transformation—which is not just their transformation but, in so far as it takes place in the real world, also has positive and negative effects on the world they inhabit. Recollective reconstruction of the tradition—of an earlier sequence of historical transformations—opens up previously endorsed goals, commitments, and conceptions to rational assessment. Goals become objects of understanding and are then susceptible to revision and, where necessary, relinquishment. It is this susceptibility of goals to a kind of revision and assessment whose norms can themselves be discursively reappraised that prevents the intrusion of predetermined goals (whether natural or normative) into the conception of collective general intelligence.

By applying the principle of rational integration to its temporal manifestation in time, geist conducts a cognitive inquiry into the conditions required for both its temporal synthesis and the synthesis of temporality as such. It is a pragmatic component of the project of collective general intelligence to transform itself by renegotiating the links between the temporal categories of past, present, and future. But its critical component consists in reexamining and redefining the nature of temporality—even if that means dispensing with those temporal conceptions and categories to which it has become accustomed. Mind's consciousness of its history is ultimately the exploration of history as the interface between subjective time and objective time, temporal forms and time's formlessness.

The history of geist, properly understood, is a recognitive-cognitive technology. It is not only a semantic web through which geist's manifest realizations (self-conceptions and self-transformations) can become transparent and open to analysis, but also a scientific milieu for the development of cognitive means and practical technologies for subjecting what is a manifest realization—the appearance of a totalized history—to a concrete transformation, scientifically suspending what was previously deemed a completed historical totality in an ongoing process of totalization, namely, history. Geist's concept of revolution requires a scientific intervention in history so as to transform what appears to be the manifest destiny or the totality of history into history proper, in which all achieved totalities are merely fleeting manifestations.

Here we arrive at Hegel's idea according to which geist's self-apprehension as what is in itself (the fleeting reality of its manifest realization) must be subjected to what geist is for itself (what it takes itself to be, its labour of conception). This is because 'what it conceives itself to be' is receptive to correction and susceptible to profound changes stemming from the undermining of appearances by new orders of intelligibility which are outcomes of a systematic project of cognitive inquiry or science. Thus what count as conditions required for the realization of geist cannot be limited to the constellation of different particular models of selves, the modes of their organization, and institutions which reflect the manifest realization of geist. These conditions must also involve the development of cognitive

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and practical tools for bringing manifest realizations of geist under the rational unity of superior and more adequate modes of consciousness. Only once a manifest totality is *understood* as an appearance, a fleeting realization, can it be concretely overcome. Here 'adequate' means both richer forms of content and context-awareness, and a sensitivity of these modes of consciousness to resources (cognitive, practical and material) and diverse intersubjective relations between subjects that encompass a broad range of economic and other relations.

THE DASEIN OF GEIST

Spirit is supposed to be cognized in its own 'outer' as in a being, which is language—the visible invisibility of its essence. [...] Here once again we see language as the existence of spirit. Language is self-consciousness existing for others. It is self-consciousness which as such is immediately on hand, and as this self-consciousness, it is universal.⁵⁹

Both self-consciousness and historical consciousness require recognitive and recollective, retrospective and prospective cognitive abilities. But these abilities can only be acquired through language, as a scaffolding for the organization of a community of normative-status-bearing apperceiving selves. This is where the role of language as the dasein of geist and as a generative platform upon which mind takes shape and evolves in time comes to the foreground. In its most basic and necessary form, language is merely discursive speech (an ordinary natural language). In such a natural language the interface between the syntactic and semantic is interaction, or pragmatics as the social *use* of syntactic-symbolic vocabularies, which progressively affords new levels of semantic complexity or conceptual expressivity. The concepts of language are not merely labels or classifications, but descriptions. There are concepts that do not simply describe, but also allow cognitive simulation via counterfactuals. Semantic complexity in its full richness, then, comprises different grades of concepts, concept-using

⁵⁹ Hegel, Phenomenology of Spirit, §323, §652.