Causality of the Will and the Structure of Freedom

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Does the neuroscientific dissolution of phenomenal immediacy of selfhood and the intuitive concept of free will admit the exercise of freedom or in fact given the severity of the challenges posed by cognitive neurobiology against the most allegedly transparent facts of experience, the talk of freedom is unmasked as something more akin to the talk of magic and miracle? The claim put forward in this presentation is that we cannot coherently answer this question without identifying the type and locating the proper locus of the causality of the will as distinguished from the 'capacity for choice' (*Willkür*). But this task is far more demanding than it is usually assumed in rationalist philosophies of normativity. A significant part of this task rests on how far and how meticulously we can differentiate reason as the site of the will (the *form* of intentional action) and freedom (as a positive determination) from understanding and ordinary consciousness, in effect, continuing the Hegelian gesture of wresting reason from the residues of Kantian account of reason as a faculty that is still bound to the structure of experience. Drawing on the works of Kant and Hegel on the role the causality of the will plays in forming the structure of freedom as well as the more contemporary disquisitions provided on the subject by the likes of Wilfrid Sellars and Sebastian Rödl, this presentation examines the concepts of autonomy, rational subjectivity, the form and causality of the will in connection with philosophies of action and freedom. The conclusion we will arrive at is that the rational interpretation of the will as a power to act in accordance with the Concept (*Begriff*) and positive freedom as rooted in the formal qua non-substantive autonomy of thought not only withstands the cognitive science's assault on phenomenal selfhood and the relative autonomy of the induvial subject but also is fully agreeable to the mobilization of the de-individualizing vector of the cognitive neuroscience as an opportunity for a true collectively determined freedom.

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As intimated in the synopsis, the focus of this presentation is a strictly philosophical—rather than sociopolitical—inquiry into the notions of the will, autonomy and freedom, particularly as conducted by the philosophy of German Idealism, specifically Kant and Hegel, as well as the continuation of their work by the likes of Wilfrid Sellars and Sebastian Rödl. The reason for this choice is twofold. Firstly, it is German Idealism that integrates these concepts within its system as core theoretical components and in that, it is the first methodic inquiry that breaks away from the ordinary talk about the will and freedom whose fuzziness and lack of proper definitions have

contributed and will contribute to endless perplexities and absurd claims about the nature of the will, action and freedom. Given the sociopolitical implications that such claims about the role of the agency in thinking and acting have on the question of freedom, the stringency and systematicity of the theoretical work on these concepts should not be treated as an intellectual hubris but a necessary step for a coherent and consequential practice. As Lorenz Puntel painstakingly lays out the issue, any practical claim or deontic attitude is first and foremost a theoretical statement or sentence, but one that contains a practical-deontic content.[1] Here the minimum necessary criteria for defining theoreticity is a semantically transparent system capable of expressing both the micrological informational content of sentences / statements (or class of statements) of the theory and the macrological informational content of the inferential relations between those sentences / statement (or class of statements) in a wholly determinate manner.

While contemporary neuroscience will undoubtedly continue to advance and shatter our intuitions of ourselves in the world, its philosophy continues to piggyback on ordinary concepts of the will, self-consciousness, mind and action. Having dispensed with the philosophical rigor necessary to differentiate, define and present key theoretical concepts under which the empirical achievements of neuroscience are expressed and elaborated, philosophy of neuroscience as the interface between the real science, theory and culture in the broadest possible sense has become, to an extent, not only a naïve materialism touting pre-critical philosophy at the expense of science but also a politically-unconscious theoretical handmaiden of today's politics of collective enfeeblement and methodic individualism.

But the second and more important reason is that at the core of German Idealism of Kant and Hegel (transcendental psychology for Kant and phenomenology of spirit and the science of logic for Hegel), there is a fully elaborate and advanced conceptual inquiry to the structure of mind and subjective capacities. It is not only that this facet of German Idealism is a precursor to cognitive science (philosophy of mind, language and artificial general intelligence among others) but also and more importantly, the conceptual problems posed within the philosophy of German Idealism which should be seen as a philosophical system addressing the broad issues concerning how various aspects of mind, action and knowledge hang together are in fact the very conceptual problems of cognitive science.

Now with this brief introduction, I would like to provide a rough view of Kant's transcendental psychology and by moving across a few key concepts attempt to address the problems posed in the synopsis. In the *Critique of the Pure Reason*, Kant sets out to formulate and tackle the question of transcendental deduction, namely, by what right (*quid juris*, the jurisprudential meaning of deduction) can we have a priori objective knowledge of the world? In other words, the question of transcendental deduction is the question of epistemic rights of acts of cognition (*Erkenntnis*) specifically when related to employing a priori concepts and endorsing a priori

[1] Lorenz Puntel, *Structure and Being* (The Pennsylvania State University, 2008).

synthetic judgements. Then properly speaking, the transcendental is concerned no so much with objects qua the intended or the known which are the results or products of the act of knowing but "rather with our mode of cognition of objects insofar as this is to be possible a priori."[2] In short, the transcendental is associated primarily with cognition rather than knowledge (*Wissen*), insofar as the former refers to the specific structuration of subjectivity by virtue of which the empirical subjects can have such attitudes as doubting, believing, knowing and correspondingly their results or products.

What Kant means by a priori is that which is not gathered or followed from particular experiences. This does not mean that a priori cognition does not begin with experience, but that beginning with experience is not the same as arising from experience. And in fact, the possibility of having experience rests on a priori conditions i.e. conditions which are not composed of any mixture of sensibility, nor are derived from sensibility. All sensibility can provide for a priori conditions are pure intuitions and the mere form of appearances. In contrast to the particularities that are solely derived from experience, a priori conditions are generalities that apply universally and necessarily to all instances of possible experience. Framed in a slightly more contemporary fashion, a priori conditions are invariances and regularities that are extracted not from particular encounters with the world but from the manners by which these encounters or interactions at different levels are organized (e.g. the inductive-statistical regularity of successions that are organized out of observations and sense impressions, or the rule-governed regularity of logico-linguistic inferences that are organized from the social use of language). All a priori cognitions are, according to Kant, transcendental which means they are concerned with modes of cognition that supply the form of all possible experience and bring about the possibility of the empirical subject's epistemic attitudes.

Therefore, the question of the epistemic rights of our a priori objective knowledge of the world is in reality the question of epistemic rights of the conditions of our a priori cognition which are the necessary forms of all experience. Since all a priori cognitions are transcendental and the transcendental is ultimately matter of the complete structuration of subjectivity, then to answer the question of transcendental deduction, one must first investigate the complete structuration of subjectivity in which all formal, semantic, pragmatic and ontological structures necessary for defining various aspects and modes of relation of the mind to the world are integrated as a complex whole. In answering the question of the transcendental deduction, it soon became clear to Kant that this question could not be adequately answered without a thorough analysis of *the conditions necessary for the possibility of having mind*, or what Kant calls transcendental psychology. Here mind is precisely that integral and complete structuration without which we cannot attribute any categorical structure to the world. Therefore, from a different perspective, Kant's transcendental psychology opens a line of critical assault on what Selllars calls the myth

[2] Immanuel Kant, *Critique of Pure Reason* (Cambridge, UK: Cambridge University Press, 1998), 139.

of the categorial given, "the idea that the categorial structure of the world—if it has a categorial structure—imposes itself on the mind as a seal imposes an image on melted wax."[3] Once characterized as a block of wax or a blank slate on which the structure of the world qua the totality of data is imprinted, in the wake of Kant's transcendental turn, the mind is introduced as that integral structuration that ascribes structure to the world and instead, the (sense) data become the blank slate. In this sense, transcendental psychology can be framed as an inquiry into the conditions necessary for the integral and complete structuration that is capable of ascribing structure to the totality of data qua the world or being.

Having thus outlined the link between the epistemic rights of the objective knowledge, a priori cognition and conditions of possibility of having mind, we can say: The conditions which are necessary for having mind (i.e. an integrated structuration capable of integrating or synthesizing categorial structures) are the same conditions that warrant the epistemic rights of a priori objective knowledge. This is the surprise turn that Kant's initial inquiry takes, moving from the question of transcendental deduction to a field of inquiry into the complete structuration of the subjectivity called transcendental psychology—that is, conditions of possibility of having mind.

These conditions of possibility can be roughly mapped onto a multi-level hierarchy in which lower and higher levels are in complex interactions. At the lowest level of this hierarchy, there is sensibility, then moving upward, imagination, then understanding and finally reason. Sensibility is the capacity to be receptive to the impingement of items in the world and can be expressed purely in causal terms. It is a condition of possibility in that it provides the presence of raw material data to the mind. We can identify sensibility in terms of a sufficient causal structure—a nervous system—capable of regulation and mediation between environmental input and behavioral output. Sensibility itself is comprised of two layers, the outer sense and the inner sense. Outer sense can be treated as a causal structure that is sufficient for being affected by the impingement of items in the environment, i.e. stimuli. Inner sense on the other hand is an internal model which is partly associated with the constructive memory and is capable of reporting to the mind how it is being thus-and-so affected by items in the environment within time. The manner in which these external impingements are reported can be seen as models organized along a temporal series, what the sense impression was (the initial impression of an item), what it is now (the transformations that the previous impression has undergone due to the situatedness of the organism) and what this reproduced impression will be, namely, the anticipatory model of the item. The difference between the outer and inner senses is that the outer sense is simply concerned with a receptive causal structure, but the inner sense is a non-conceptual meta-awareness (mind being *de facto* aware of how it is being thus-and-so affected). This is a meta-awareness in the sense that the mind is affected by the *impressions* of how the outer sense is being thus-and-so affected by the impingements of environment. In this sense, the inner sense

[3] Wilfrid Sellars, *In the Space of Reasons: Selected Essays of Wilfrid Sellars* (Cambridge, Mass.: Harvard University Press, 2007), 237.

has a lot in common with the neurocognitive concept of the global workspace developed by Bernard Baars and studied more recently by Stanislas Dehaene under the rubrics of the attentional system and attentional amplification. However, the difference between what Kant calls the inner sense (or inner perception) and the global workspace is that the inner sense is not just about the mobilization or availability of sense impressions to the mind but also, properly speaking, it is a non-conceptual and non-apperceptive faculty that reveals our perceptual states—which are both contingent and particular—in time. Without this time-order in which the encounters with items in the world are temporally, in a *de facto* manner, organized, there wouldn't be any experience. However, there is no agency or a priori acts of cognition at the level of the inner sense insofar as both the apperceptive agency and a priori acts are necessary to all awareness of objects, whereas the states of the inner sense are merely contingent and particular. It is precisely this necessity (as opposed to the contingency of the states in inner sense) that points to the transcendental condition.

The second necessary condition, is imagination that comes in *at least* two forms. The more rudimentary form is concerned with the capacity of organizing sense impressions spatially and temporally so as to provide material for the construction of a singular representation of a particular object (*Gegenstand*)[4] or what can be called the *intuited* image. The more complex form, the productive imagination, is merely understanding in the guise of imagination. The productive imagination is brought about by the application of pure or general concepts—categories of understanding—to the products of the more rudimentary imagination qua the intuited. The third and fourth levels are understanding and reason. This is where we have something like the necessary unity of apperception or the *I* (which should not be confused with the empirical-phenomenal self) that not only accompanies all the instances of experience but also is the very condition of having a spatially and temporally organized experience. The question of the subject only arrives at the levels of understanding and reason where we have the abilities of forming and applying categories or general concepts, making perceptual judgements about the content of our experience, and form more advanced—non-perceptual—judgements and specific concepts without which higher-level cognitive activities are impossible. The issue of the autonomy of the intellect and the will only surfaces at these two levels.

It the *Critique of Pure Reason*, in referring to the will Kant uses two different words, one is *wille* (the will) and the other is *willkür* (the capacity for choice). However, Kant does not make the proper distinction between these two concepts until his more mature work, the *Groundwork of*

[4] Just like the confusions precipitated by mistaking *willkür* (the capacity for choice) for *wille* (the power to act in accordance with the concept), the conflation of *gegenstand* and *objekt* has caused numerus philosophical misunderstandings. What Kant means by *objekt* is the object of thought, yet generically differentiated from thinking (e.g. space and time are *objekt*). Whereas *gegenstand* strictly refers to object as that which (a thing in space and time) is distinguished from other items in the world. It is far from obvious that conclusions derived from the syntheses required for constructing and representing *gegenstand* can be extended to conclusions regarding the nature of the *objekt,* and vice versa. Unfortunately, even at times the mighty Sellars gives in to this conflation.

the Metaphysic of Morals, where the will is associated—albeit not meticulously in the way that Hegel does—with reason. Accurately characterized, *willkür* is a capacity that belongs to the subject of understanding as a complex of experiences and reason as a mere faculty. On the other hand, the will is not a capacity but itself the practical subject of reason as an order. My claim is that by virtue of identifying reason as a mere faculty bound to understanding, Kant's account of the will is still a *willkür* albeit one that is rational. By sufficiently distinguishing reason from understanding and reason as an order from reason as a mere faculty, it is Hegel who provides a coherent and precise account of the will.

Before moving forward, it is important to point out that through a careful engagement with Kant's work, one can easily come to this conclusion that awareness is not knowledge and consciousness is a purely natural phenomenon. The core of consciousness is sensibility, outer and inner senses—a causal structure sufficient for regulating and mediating between environmental input and behavioral output—and thus it can be thoroughly laid out in terms of causal neural mechanisms whose origins are in evolutionary processes. Consciousness is, therefore, an empirical phenomenon and for that reason, it is the object of empirical studies such as neuroscience. What Kant and Hegel call self-consciousness on the other hand is neither simply an introspection into the phenomenal properties of selfhood nor a knowledge of the empirical self, it is a consciousness issued from and licensed by the powers of understanding and reason, or concepts and judgements which are enmeshed in intersubjective, formal and inferential linguistic activities. The self of self-consciousness is not the self of phenomenal reality, but a self whose selfhood is a transcendental dimension necessary for judging and being judged. This formally and socially instantiated self is the locus of claiming rationality authority and responsibility for what is said and done. Put more accurately, the self of self-consciousness is a being of the concept, in the sense of that it not only falls under the concept but also its acts are issued from and exhibit the concept. For this reason, it is necessary to differentiate the concept of self-consciousness as used by Kant and Hegel from the ordinary intuitive concept of self-consciousness which can signify introspection by and into the phenomenal dimension of the self, or either the awareness or knowledge of the empirical self.

At the level of consciousness (a natural phenomenon) which is built upon the causal structure of sensibility, there is no spontaneity or autonomy that we can associate in any meaningful sense with freedom. This is because sensibility is itself a causal structure that is passive with regard to external causes impinged on it by items in the world. However, one might object that this causal-mechanistic view that raises the issue of non-spontaneity only holds for the outer sense, but when it comes to the inner sense or the inner perception which is the capacity of the mind to be affected by its own states, we can indeed talk about spontaneity or autonomy. For what is spontaneity of the mind if not its ability to be affected by itself rather than a foreign cause, acting in accordance with its own states rather than the dictates of something from the outside? But following Kant who describes the causality of nature as one in which the causality of the cause is

being caused, here also we have the causality of nature rather a form of spontaneity or autonomy. For even though at the level of inner sense, the mind is affected by its own inner states as opposed to something foreign, this inner causality (the change from one state to another) is itself caused by foreign causes. Put differently, even though the mind is caused by its own states, being in these varied states is itself caused by something else, a foreign cause. Accordingly, the mind's acting or representing in accordance with these states suggests neither spontaneity nor a free agency.

Let's pause and clarify this issue: Imagine a case of billiard ball causation. The impact of the cue ball on the stationary ball causes the target ball to move. In this example, the cue ball's impact is a cause in the sense that it is a change of the state in the *motion of the target ball* (i.e. the state in which the target ball is). Now we might be tempted to think of a temporal interval—albeit very small—between the cue ball's impact and the target ball's motion, to see the motion of the target ball as an action at a temporal distance from the cue ball's impact, to treat the motion of the target ball, its change of state, as something spontaneous or at least far extended from what caused it i.e. the cue ball's impact. But Kant rejects this idea by pointing out that "in the instant in which the effect first arises, it is always simultaneous with the causality of its cause."[5] What Kant means is that every instance of causation—which also includes cases of successive event causation—presupposes an instance of simultaneous causation where the causality of the cause is always simultaneous with the onset of its effect. Moreover, to the extent that every causation of a cause arises from a prior cause, we can conclude that *in nature* nothing is the cause of itself. The simultaneous causation is exactly, according to Kant, the mere causality of nature. We might be tempted to see the field of experience and the mind being affected by its own states as extended beyond the reach of the causal impingement of foreign items, treat the difference between the impingement of foreign causes on senses (the passivity of the outer sense) and the mind's faculty to be actively responsive to its states (the inner sense) as the token of the spontaneity of the latter. But this is a mistake, the regression of the causality of the cause to yet higher causes is inevitable. In virtue of simultaneous causation, the entire field of experience and the mind affected by the change of its own states belong to the order of nature. The alleged spontaneity of the former is an instance of the encompassing causality of the latter:

> [E]verything that happens must have a cause, and hence that the causality of the cause, as itself having happened or arisen, must in turn have a cause; through this law, then, the entire field of experience, however far it may reach, is transformed into the sum total of mere nature.[6]

The empirical self as an object of knowledge can therefore be portrayed as a passive self rather than an autonomous self, by passive Kant means being caused to be in the state in which *it is*

[5] Kant, *Critique of Pure Reason*, 532.
[6] Ibid., 533.

caused to be in by a prior state which is not itself a state of the mind. If X is caused by its inner states, then for the reason that every cause is also caused by another cause, it can be concluded that the causality of X is itself caused by an antecedent state (a cause) prior in the order of being. The mind affected by the change of its state is passive with regard to an antecedent state which is, properly speaking, not a state *of* the mind. Therefore, at the level of the inner sense where the issue of an inner causality of the mind first arises, spontaneity or unconditioned causality is only a figment of the causal-material structure which in our case happens to be the brain.

Here, of course, there is a discussion to be had regarding the issue of passivity with respect to foreign causes. It is true that for a system to be in the state it is in, it must have—by physical necessity—followed on from an antecedent state. The system could not come to be in its subsequent state if it were not because of an antecedent state. But this is not the same as saying the current state of the system is caused by a foreign cause. Certainly, the present state of the system is the physical consequence of things done to it—the history of its interactions—in the past, but this, as Sellars points out, does not mean that "that the explanation of the present state of such a system lies entirely in 'other things'"[7]. The issue of passivity that Kant raises with regard to the inner sense can be couched entirely in terms of the foreign causes not as 'other things' but as the material substance qua the embodiment of an objective temporal order from which the inner sense derives its objective temporal order in the form of a temporal organization of impressions of items in the world. In other words, the temporally organized states of the empirical self (the impression of an item, the reproduction of that impression and the anticipatory model built on that reproduction) are the perceptual states in which the empirical self is caused to be in by the material substance which is the embodiment of objective temporal order.

Now that we have excluded spontaneity or autonomy from the realm of mere consciousness and the empirical self, it is time to return to the domains of understanding and reason where, as mentioned earlier, we can speak of subjectivity, self-consciousness, the will (the power to act according to the concept), autonomy and freedom. The question we should be asking is this: 'Is the subject of the understanding realized by what Kant calls the synthetic unity of apperception a truly autonomous subject or like the conscious empirical self, only enjoys a relative spontaneity?' To answer this question, it should be noted that the faculty of understanding is a particular domain of the a priori. It is the faculty of both applying the general concepts of understanding—the so-called categories such as quality, modality, quantity, and so on—to local invariances or rudimentary representations organized by the faculty of the imagination, and bringing what is intuited under the generality of pure concepts or categories. The a priori concepts of understanding—which play a classificatory function required for the stabilization of representation and object construction—are not derived from any particular instance of experience. This is how they fundamentally differ from the particularities of the experience and

[7] Wilfrid Sellars, *In the Space of Reasons,* 426.

by extension, the inner sense and the rudimentary lower-level imagination. Pure concepts of understanding are derived not from sense-given materials or particular instances of experience which as we saw are passive with regard to foreign causes, but from *the manner* by which the mind organizes sense-given materials. Categories or pure concepts of understanding are, accordingly, general classificatory functions capable of integrating local invariants synthesized from sense-given materials and therefore, constructing general rule-like invariants for the construction of objects, identification of local of variations and reidentification of local invariants in different encounters with items in the world.

With all that was said about the faculty understanding and how it differs from the inner sense, we must ask, 'is the understanding subject—the apperceptive self capable of engaging in perceptual judgements through the application of pure concepts—a genuinely autonomous subject, a true candidate for freedom?' The answer is negative. Even though the subject of pure concepts of understanding is not identical to the empirical self or the inner sense, it is nonetheless a subject that is formed in reaction to foreign causes and stimuli since categories of understanding are still conceptual extensions or correlates of sense-given materials. In other words, the understanding subject is still the subject of experience. Despite the fact that the perceptions and intuitings of the understanding subject are apperceptive and its interactions with the world are conceptual, the subject of the understanding is still in the bounds of sense-given materials. Therefore, the spontaneity or autonomy of the understanding subject is only a relative autonomy in the first instance and a passivity to foreign causes in the last instance. To clarify this point, let us cite an illustrating example of this purported spontaneity given by Wilfrid Sellars:

> Consider a computer which embodies a certain logical program, a set of computational dispositions. Even if 'turned on' and humming with readiness, it still does nothing unless a problem is 'fed in'. Furthermore, once this happens, it moves along in accordance with its logical disposition. At certain stages it may 'search its memory bank'. This search, however, is itself the outcome of the initial input and its computational development. And although, with this qualification, it 'initiates' the 'search', the information it gets is information which as computer, it is caused to have-i.e. more input. Here also it is passive.[8]

At the level of understanding, the spontaneous activity of the mind—akin to the life-like whirring of a computer running through its physically embedded logical gates—is set in motion by a causality that even though appears as the causality of the conceptualizing mind, is in reality a causal routine whose causality is being caused and thus, is a causality of nature where autonomy is at best relative or conditioned. So to answer the question posed earlier, it must be said that the apperceptive subject of understanding is comparable to an automaton whose conceptual activities or responses are initiated by antecedent states which are prior in the order of

[8] Ibid., 428.

being. Yet this is an automaton who as a result of experiencing itself and the world entirely through the conceptualizing mind is always predisposed to mistake its relative autonomy for an absolute or unconditioned autonomy.

To the extent that the subject of understanding or categorial judgement is still bound to experience and to the extent that the realm of perceptual experience can only have at best a relative autonomy, we can conclude that even though the apperceptive self or the subject who engages in conceptual activities that extend beyond the horizon of pure phenomenal consciousness, it is still bound—in virtue of its experiential constitution—to the realm of foreign causes. In this respect, the subject who is endowed with an a priori objective knowledge of the empirical can be portrayed in terms of causal mechanisms and routines. Its spontaneity—which is the spontaneity of the conceptualizing mind in organizing and representing the raw materials of perception but also acting in accordance to such organized perceptions—can be expressed in terms of a cause whose causality is caused by foreign causes, and thus identified as a phenomenon that belongs to the domain of natural or conditioned causes, if not being merely an epiphenomenon of them. Therefore, the spontaneity of the conceptualizing mind and with that the autonomy of the experiencing subject of understanding are also not the appropriate sites of freedom and the autonomous will.

So far we have ruled out the candidacy of the consciousness mind and the experiencing subject of understanding—the conceptualizing mind as in contrast to mere phenomenal consciousness—as the loci of genuine autonomy and freedom. We should now ask, what is then the subject of the autonomous will and freedom? Isn't it more fruitful to declare the non-relative or unconditioned account of autonomy, genuine freedom and the pure will as obsolete concepts and move on to things that more worthwhile? The answer is no, definitely not: the non-relative qua unconditioned account of autonomy and the freedom of the will are not attributes of consciousness, phenomenal selfhood or even as agued the apperceptive understanding subject or the conceptualizing mind. Locating the roots and reality of these concepts in experiential horizon of subjectivity and particular individuals (persons) is at once a ill-motivated ambition and a pre-critical categorical mistake which is an endless source of logical, philosophical and sociopolitical befuddlement.

The non-relative or unconditioned account of autonomy, freedom and the pure will are not to be found in the subject of consciousness (phenomenal or conceptual) but in the subject *of* reason, that is a subject bound by and realized by the order of reason and transcendental ideas. Autonomy of the will is an attribute of the rational selfhood constituted by the formal (rather than substantive), logical, linguistic social and interpersonal domain of reason and laws that are species of 'ought' rather than 'is'. The subject of reason is neither natural nor supernatural, it is formal, logical, linguistic and impersonally social (as in contrast to the mere socially constituted horizon of the experiential subject or the individual). However, the unnaturalness of reason does not amount to the metaphysical duality of the mental and the physical, since the difference

between reason or thought and the order of being to which consciousness belongs is not a substantive difference but a formal one. The kernel of reason's unnaturalness is its formal negativity whose locus of realization is in logic and language which establish the transcendental dimension of the complete structuration of subjectivity. Of course, it would be a shortsighted mistake to restrict what is meant by logic to classical logic and what is meant by language to natural languages. Moreover, reason is not supernatural either because its unnatural nature can be examined in terms of logic and language. The formal negativity of reason can be analyzed in terms of the syntactic, semantic, pragmatic and computational properties and behaviors. This is exactly the kind of analysis that is being carried out today under the unified banner of philosophy, interactive logic, linguistics and theoretical computer science, specifically the study of behaviors and structures of logico-computational interactions.[9]

The will is not a property of consciousness but of thought as formally and not substantively differentiated from the former. The autonomy of thought, its unconditioned causality, is the formal causality of what it means to represent something as true (judgements) and what it means to represent an action as good (the form of the will), that is to say, theoretical and practical reasons. The form of the will (the power to act according to the Concept) is not a correlate of the individual experiencing subject but the collective self-determining subject instantiated by formal causality of thought belonging to the order of reason or autonomy. It is the correspondence between the will and autonomy expressed in terms of the formal qua logical, linguistic, inferential—rather than substantive—causality of thought which is the key in grasping the concept of freedom.

Both Kant and Hegel speak of a certain unconditioned causality for thought without which the notion of freedom is meaningless. But as argued, this unconditioned spontaneous causality belongs not to the order of nature but the formal order of reason. This is the formal causality of thought sustained by a formally represented, rational and self-conscious order, which is the order of reason. Belonging to the order of reason, freedom does not suggest a lack of determination by any cause, nor does it signify the absurd, vacuous and arbitrary idea of being free from all determinations and constraints, to act as one pleases, to not be determined by anything. In other words, the spontaneity that is the essential feature of the causality of thought does not mean that thought is not determined by anything. Instead it means that what determines the causality of thought is its formal order, its constraints and rules which make up that very order. But also being determined by the formal causality of thought is not the same as determination by natural causes as is the case with the order of consciousness and the experiencing subject.

Freedom is the matter of determination by the causality of thought, which is neither the causality of nature implicit in consciousness for it belongs to the formal order of reason nor is it the lack of

[9] For a lucid and methodical introduction on this topic, see James Trafford, *Meaning in Dialogue: An Interactive Approach to Logic and Reasoning* (Dordrecht: Springer, 2017).

determination by causes. The structure of freedom is nothing but being systematically constrained and caused by the order of reason and its impersonal laws. But these are laws that are not natural in the sense that they are the laws of the rational agents' own collective legislation, the objective principles that are sharable and necessary for having *any* norm whatsoever. These laws are not merely one's own laws insofar as they are derived from one's own nature—as in contrast to a law imposed by a foreign cause—but they are one's own laws because they are laws that reconstitute and reorganize one's nature not in spite what is naturally given but in spite of it. Accordingly, freedom qua the ability of acting and thinking not by what is given to us by nature but by what we ourselves collectively determine, constitute and legislate under the impersonal aegis of reason then cannot be thought in terms of a natural birthright, or a given law but an ongoing, continuous anguishing historical struggle. This is a struggle for (1) collective self-determination (as in contrast to natural self-organization which all organic life forms possess in different degrees) and (2) self-constitution (that is, conceiving and transforming ourselves in spite of our given biological constitution into a constitution that even though is still steeped in material and causal structures is in accord with the demands of the collective legislative reason). Freedom is, accordingly, not what can be identified as something that is given in advance in consciousness or the conceptualizing mind, but a continuous labor of theoretical and practical reasons, which is to say, the intellect and the will.

The attempt to ward off the alleged threat of the neuroscientific disenchantment of the freedom of the experiential subjectivity is as ill-founded as the attempt to scientifically or philosophically locate the pure will and freedom in our biological structure or experiential subjectivity. Freedom belongs to the formal order of reason, and its realization is a matter of a rational struggle enmeshed in the intellect and the will. To apprehend the structure of the freedom then it is necessary to examine in addition to the powers of intellect (i.e. what it means to represent something—a belief, an intention, a maxim—as true), the powers of the will (or what it means to represent an action as good). But this account of the will is not simply the capacity for choice, the individual's *willkür* whose autonomy is always relative, but the will as the manifestation of autonomy qua the formal causality of thought which is as much the ground of the individual's choices as it is a condition for the possibility of objective and intelligible freedom. I said the ground of individual choices because belonging to the order of reason and self-consciousness, the will is the power to act in accordance with the Concept, general infinite ends which are inexhaustible by choices for taking particular courses of action. Yet not only such general ends are inexhaustible, but also and more importantly they organize different and even sometimes incommensurable choices into an objective unity.

Take for instance, a general end such as being just. Under this inexhaustible general end, at one point I choose to help my friend instead of working on this paper. Another time, I choose to prioritize the interests of the group over my ideological convictions so we can stand against what we all deem as unjust. While all these choices of action lead to particular ends which once

reached are being exhausted, they are nevertheless issued forth from an inexhaustible end which is the concept of justice. But even more radically, these choices are only intelligible to the extent that they both fall under and exhibit this general inexhaustible end. Put differently, they are intelligible as choices only insofar as they belong to the objective unity of a general end that belongs to the order of reason. This general end qua the Concept is the necessary form for the intelligibility of our choices, and in that generality and necessity it is precisely the transcendental dimension of actions.

Let us take a step back and disentangle the concept of autonomy in relation to the will. We now know that autonomy is neither the absence of determination nor causality, it is determination by the causality of thought, that is the formally represented and representing order of reason and self-consciousness. It signifies a certain form of being bound to laws and constraints which are imposed neither by nature nor by the individual subject of experience and understanding, but by the interpersonal subjectivity of reason which is in its very special kind of inter-personality is also impersonal—that is, de-individualizing and cognitively communist. The autonomous subject in this sense is not really a particular individual but the will given itself to the order of reason and its laws, an acting subject whose subjectivity is realized by the formal causality of thought which is but the order of reason. The self-consciousness of this subject, the will, as Sebastian Rödl remarks originates from me, the *I* that is not subject to anything, not even my particular experience other than reason:

> A subject represents acts of hers falling under a formally represented order in unmediated first person thoughts. Her acknowledgment of this order, contained in these acts, is an unmediated first person thought as well. Hence, a formally represented order is one's own in the sense that 'one's own', here, is a first person pronoun. As a formally represented order is an order of reason, being autonomous in this stronger sense is being subject to laws of reason. Being under laws of reason, I am subject to nothing other than myself in the sense that these laws spring from, and constitute, the nature of that to which I refer first personally.[10]

The order of self-consciousness expresses a form (rather than a substance) of life that exists by virtue of its causality of thought. Its thoughts cause or explain its actions and its actions not only fall under its thoughts but also exhibit the very thoughts to which they are identical. This normative causality of thought that explains the actions of the self-conscious subject and undergird the unity of its thoughts and actions is called the order of reason which is also the order of self-consciousness. This order is formal, its formality signifies an explanatory-causal relation between thoughts and actions according to which the order of thought causes actions and actions exhibit and make explicit the order of thought. It is important to once again note that thought is not consciousness or experience. Autonomy expresses this formal causal relation

[10] Sebastian Rödl, *Self-consciousness* (Cambridge, MA: Harvard University Press, 2007), 120.

between thought and action which is not per accident or an external cause but in accordance with the order of reason or self-consciousness. The will is precisely the practical expression of this causal relation between thoughts and actions, between the general or infinite ends of reason and the action which at once emanates from and makes manifest such inexhaustible general ends.

Thinking freedom is impossible without what the autonomy of the intellect and the will entail, without treating the will itself as a subjectivity realized by the order of reason manifested in the domain of action. The proper subject for that anguishing historical struggle which is freedom is the collectively and rationally constituted practical subject of reason which is the will. But the will as the power to act in accordance with the order of reason is not a sufficient condition for the realization of freedom unless it is coupled with the collective general intellect which belongs to the order of truth or norms of representing something—a belief, a claim or an intention—as true.

Thus if the will in the above sense defines the very subject of freedom, and if the will is not the experiential subject but the subject bound by the order of reason, and furthermore if the order of reason is formally instantiated not by the experiencing individual but the self-determining collectivity that is at once bound to its legislated norms and is capable of legislating norms, then to invest *all* ambitions of freedom in the idea of the individual's free choices is but a hallmark of misguidedness. It is a delusion that is no less acute than the illusion of the phenomenal selfhood in treating itself as the spontaneous cause of its impressions and actions.

Having examined the site of the will and autonomy, we are now confronted with a far more difficult question. If the will is the subjectivity that originates from the formal and impersonal order of reason as differentiated from experience and if freedom is unrealizable without the will, then how can we—us as individuals both burdened and moved by our lived particular experiences—think freedom? In our vastly incommensurable experiences can we think about a concrete account of freedom capable of delivering us from the relative spontaneity of our selves, or should we abide by the notion of freedom as an unattainable ideal, a regulative ideal permanently sealed off to the individual subject of the experience much like a mirage that is at once a beacon and an illusion?

The answer of course depends on how seriously we take the idea of a freedom that is not given in advance in any way whatsoever, how far are we willing to treat freedom as as an object of struggle rather than as something that can be found in the constitution of the conscious subject of experience. The practical subject of reason is neither foreclosed to the individual subject of experience nor is given to it in advance. The task of the experiencing subject—that is each one of us—in reclaiming its freedom beyond the illusions of the empirical self is to adapt to the practical subjectivity of reason for which nothing has ever been or will be given or settled. Nevertheless, we as the experiencing and cognizing subjects cannot treat the subjectivity of the pure will as a given concrete subjectivity either. Just as for the subjectivity of the pure will, there is no freedom as a given, when it comes to the experiencing subject, there is no pre-established

conformity to the subject of the pure will either. Indeed, between the two, the experiencing subject and the subject of the pure will—lies immense tensions. It is in resolving these tensions that we can impute a certain concreteness to our thoughts of freedom and bring the contingencies of our experiences under the horizon of autonomy and self-determination. But to resolve such tensions we can neither dispense with the achievements and conclusions of neuroscience nor forego with the powers of rationality.

To conclude and summarize: The will of the ordinary experiential is only *willkür*. This kind of will was shown to be arbitrary, relative and heteronomous. Only the will as the subject *of* reason turned out to be formally unconditioned and autonomous. The candidate subject of freedom is the subject of reason, that is to say, a subject that not only belongs to and constituted by the order of reason but also a subject whose thoughts and actions exhibit that very order. We as individuals are neither purely autonomous nor purely heteronomous, neither of the will alone nor of the mere *willkür*. Accordingly, freedom for us is not a given, but a concrete project that at once aims at (1) integrating the heteronomous capacity for choice within the autonomy of the intellect and the will, thus bringing our experiential subjectivity under the order of reason, and (2) mobilizing the order of reason or the Concept (more in the sense of the Hegelian *Begriff*) to transform our very conditions of experience, not only our capacity for choice but also choices themselves. This enterprise is however a tedious and challenging task. It begins with bringing about the conditions necessary for the possibility of thinking and acting on freedom and as such entails seizing the means of cognition as a scientific, philosophical and political project of utmost significance. In this sense, there is no viable justification to not think of the de-individualizing vector of the cognitive neuroscience as indeed a building block in the construction of a true collectively determined freedom.