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Persons and Their Minds: Höffe's Action Theory and Differentiation between Dogmatic and Methodological Determinism by [Douglas R McGaughey](#) is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](#).

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PERSONS AND THEIR MINDS:
HÖFFE'S ACTION THEORY AND DIFFERENTIATION BETWEEN DOGMATIC AND
METHODOLOGICAL DETERMINISM

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Abstract

In the early 1980s, Libet's documentation of the neuro-activity prior to the application of the will ("mind time" based on Deecke and Kornhuber's notion of *Bereitschaftspotential*) suggested an exclusively materialistic, neurological cause for "voluntary" action. Complementing Libet's reductionism, Churchland sees no connection between non-material values and the brain to propose that there are no universal, moral "principles." She argues from Aristotle's notion of "moral virtue" that morality is the *consequence of habitual, pragmatic behavior* in *particular* circumstances (only?) and vilifies moral "system builders" (e.g., Bentham and Kant) for their search for "exceptionless rules".

This paper presents Höffe's theory of action that affirms (!) a material condition for action but insists that action involves a more temporally complex process than mere neuro-activity in the present. Furthermore, by distinguishing between *dogmatic* determinism (there can be *only physical causal explanations*) and *methodological* determinism (the *assumption that there are physical causal explanations* at the base (!) of all experience), Höffe makes room for creative freedom (differently than the way Searle's "causal gap" makes room for free will) and self-legislated (not heteronomously imposed), absolute moral principles in the form of a necessary *as if* that makes all the difference for understanding the human species.

Introduction

A successful defense of *categorical* morality is not dependent upon merely the fact that we can raise doubts about neuroethical reductionism. Skepticism itself demands a shift in focus toward what is *necessary* for us to doubt in the first place. The recognition that it is *necessary* for us to add a system of explanatory laws to phenomena in order to understand them (gravity is not written on the falling apple) allows us also to recognize the *necessity* of humanity's freedom to do things that nature cannot do on its own for us to understand ourselves. Although it is impossible to prove or disprove that we possess such freedom, it is also impossible for us to prove or disprove that all physical events occur according to physical laws. However, the degree to which we are irreducible to nature means that *oughts*

are not merely social, *hypoethical imperatives* as Churchland would have us believe but also include *categorical imperatives*.

At issue in this paper is our responsibility for actions that we consciously initiate by means of a causality that is not reducible to, but dependent upon and complementary to, material causality. We do not hold other animals morally responsible for their actions (even when there are indications of their grasp of technical and pragmatic imperatives) because they appear to be driven to act according to such imperatives by the dictates of instinct. It is only because human beings have created new technologies far removed from the instinctual stimulus/response structure shared with other species and capable of doing things that nature could never create on its own that we now seem confronted with “empirical” evidence that voluntary¹ action is preceded by brain activity, which is taken to indicate that there is a direct determining connection between brain activity and the subsequent action. If that is the case, then voluntary action is exclusively the product of a material causal process that eliminates our culpability for our actions.

What follows examines the following questions: 1) What elements can we identify as elements involved in action? Is action a merely spontaneous event that occurs exclusively in the present, which would be capable of measurement in terms of brain activity in the moment, or does action have its roots in a far more complex framework of the past, future, and present? 2) What does it mean to give a causal explanation to an event? Even more to the point: what does it mean to prove or disprove a causal explanation for an event? 3) If we conclude that we are always only *limited to the effects of causality*, what kinds of strategies are best for confirming the likelihood that our causal explanations are correct? 4) If we are left with the circumstance that there are some situations in which our causal explanations are highly probable (given repeatability and a blind control group), do those circumstances require that we can only acknowledge causal explanations subject to such procedures of verification as adequate causal explanations? 5) Since we experience two domains of causality (freedom and nature) but we only experience freedom embedded in the context of nature, might it be appropriate for us to embrace a methodology for causal explanations that affirms “methodological” determinism to the extent that the domain of nature is inescapable and necessary? 6) Would such a methodological determinism allow us to acknowledge that creative freedom constitutes a domain of experience that allows for culpability for our actions -- to the degree that they are the product of such freedom? 7) Is Churchland’s neuroethics not a form of hypothetical, technical and pragmatic imperatives that rejects categorical imperatives only by constructing a straw-man argument against Critical Idealism that no Critical Idealist would recognize?

What is Action?

Rather than conclude from fMRIs that free, self-determination is an illusion, the actual illusion is that fMRIs *can explain action* in a manner that eliminates any degree of free, self-determination. fMRIs give us data, but the data are effects of a cause (or causes),

1. “Voluntary” refers here to the will and whether (as well as to what degree) it is determined or not determined by physical causality. This is not Aristotle’s “voluntary” and “involuntary.” For Aristotle, the distinction hinges upon one’s knowledge (voluntary) or lack of knowledge (involuntary) of the principles one applies to one’s actions. See Aristotle, *The Nicomachean Ethics*, trans. David Ross (Oxford: Oxford University Press, 2009), Book V, §8, paragraph 1.

not the cause itself. An explanation would require empirical access to causes. It is precisely the difference between appearances and “things-in-themselves” (and their causes) that permits (even *requires*) Immanuel Kant to talk of creative freedom (*Critique of Pure Reason* B xxvii), not because the distinction between appearances and thing-in-itself proves freedom but because it makes it impossible to disprove freedom. For Otfried Höffe, then, the issue is not that there is fMRI activity prior to an action, but, rather: 1) What is the significance of that *present* activity documented by an indirect image in an fMRI within the context of *the broad, temporal process* that is an action? 2) What differences does it make for who we are if we can assume that we are free? In other words, the key question is not whether we *must be* free but, rather, whether we *can be* free?

The answer offered by Otfried Höffe’s theory of action² is not only that action involves input on the part of elements stretching across a time span of the past, future, and (!) present³ but also that there is no action without the blind, mechanical determinism of the material world.⁴ Nonetheless, just as our understanding of nature requires that we invoke what appear to be irreconcilable systems of causality in nature⁵ (Classical Physics, statistical law-like regularities, and quasi-laws or relations of indeterminacy⁶), so, too, we can invoke

2. See “5 Action” and “16 Practical Reason: Freedom of Action” in *Can Virtue Make Us Happy? The Art of Living and Morality*, trans. Douglas R. McGaughey (Evanston: Northwestern University Press, 2010), 195–209 [*Art of Living*]. Höffe maintains that “action” (*Handeln*) always involves a degree of knowledge and conscious goal setting since it is concerned with “practical self-understanding” (49). However, since knowledge of ends and means can occur non-reflectively out of habit, the combination of ends and means constitutes a “practically oriented” but not “truly practical knowledge” (49). Höffe’s concern is to examine action within the framework of categorical, “practical” knowledge -- not to be confused for “pragmatic” knowledge, which is “hypothetical” rather than “categorical.”

Ernst Tugendhat’s *Anthropologie statt Metaphysik* (Munich: C.H. Beck, 2007) appeared in the same year as Höffe’s German original of *Art of Living*. Tugendhat proposes that we must distinguish between “freedom of action” (*Handlungsfreiheit*) and “freedom of the will” (*Willensfreiheit*) since we share the former with other animals, but only human beings are held accountable for their actions as a consequence of their freedom of the will. Tugendhat argues phenomenologically that we experience a contradiction between physical, causal “determinism” and the unique causal moment of responsibility (*der Warumstop*) possessed by the individual “I.” The latter is manifest by the individual’s ability to suspend its fulfillment of a desire to search for “reasons” (*Gründe*) for acting. Although it is not possible to determine in a particular situation if or to what degree this process of distanced reflection occurs, it is possible to invoke such reasons to change one’s behavior. This leads Tugendhat to conclude that one has to distinguish between what is implicit to the freedom of the will? From what in a given circumstance is the extent of its application? (See *ibid.*, 57-84)

Wolfgang Spohn defends the compatibility of freedom and determinism by rejecting what he takes to be Kant’s “two-world doctrine” (Freedom and Nature) to embrace what he calls two “perspectives” of freedom and determinism on a single world (one could argue this is precisely Kant’s thesis!). Spohn agrees with Tugendhat that a free action is more than spontaneity and lack of coercion but must invoke “reasons” in a far broader than a merely instrumental sense. Spohn maintains that with freedom comes human dignity, responsibility, guilt, and the capacity for guilt in all of its moral and legal senses. See “Der Kern der Willensfreiheit,” in *Vernunft und Freiheit* (Berlin: Walter de Gruyter, 2012).

3. See *Art of Living*, 246.

4. See *Art of Living*, 220.

5. See *Art of Living*, 220.

6. Brigitte Falkenburg provides a far more nuanced discussion of natural causality in *Mythos Determinismus. Wieviel erklärt uns die Hirnforschung?* (Berlin: Springer-Verlag, 2012). She distinguishes among classical mechanics and electrodynamics (strict, determining laws), which are reversible, the irreversible processes of thermodynamics and quantum mechanics, and the Einsteinian causality of special relativity that involves signal transductions, which extend deterministically but constitute an irreversible process. She

the irreconcilable, yet inseparable, causal systems of blind, mechanical causality and creative freedom to account for experience without succumbing to any metaphysical, substance dualism as in the case, for example, of Leibniz' "preestablished harmony." The criterion with respect to a causal system is whether it is *necessary* if we are to understand how it is that we experience a world of appearances.

Action, in other words, involves far more than the mere brain activity in the present moment of taking a decision. It involves the establishing of a goal, which can function as a "top down" causality that nature is incapable of accomplishing by means of "bottom up" causality. Action also involves the acquisition of knowledge with respect to the *technical imperatives*⁷ that are required in order to accomplish the goal. For example, in order to build an automobile, one must acquire almost an incalculable amount of knowledge of physics, metallurgy, and electronics as well as construct a supply system of necessary raw materials. Furthermore, one must know and possess the means for the appropriate technical sequence required for the construction of an automobile. This means that in addition to the *technical imperatives* of automobile construction, one must oneself and one must gather together others (a social world) who have chosen to follow the necessary *pragmatic imperatives* that must be satisfied in order to pursue the career of an automobile worker. The fulfillment of the *technical and pragmatic imperatives* of automobile construction, however, do not begin to touch on the sparks of creativity that made the construction of an automobile possible in the first place. Without these sparks of creativity, there would be no automobile in the first place not to mention technological innovation. Even more directly to our concern: without creativity there would be no fMRI technology.

With creativity, however, we encounter another set of imperatives, *categorical imperatives*, that come into play in the original decision of goal setting: What *should* I do? Obviously, there can be no categorical *shoulds* if all that is involved in events is the blind, mechanical causality of physical nature. In short, the categorical *ought* of moral imperatives is something quite different from the hypothetical *ought* of technical and pragmatic imperatives.

As soon as we grasp that there is more to action than technical and pragmatic imperatives, we invoke a second *domain* of order into our calculations. We not only have to construct our grasp of the *physical order*'s laws of nature, which are themselves imperceptible, but we also have to embrace the order of causal freedom with its

employs Nancy Cartwright's notion of "patchwork physics" to describe the role of various causal mechanisms in order to account for physical phenomena.

Falkenburg's conclusions are that 1. neural events are not strictly determined but function like thermodynamic machines, which are stochastic, irreversible, and not linear; 2. neuro-science does not explain our cognitive capacity with mechanical causality but by means of an analogy to a computer model of intelligence; 3. the thesis of a causal coherence to nature is either senseless or false at the price of giving up the notion of asymmetrical temporal processes, 4. mental and physical phenomena are so different that neuro-scientists cannot account for mental phenomena by means of physical phenomena; 5. the causal relationship between the brain and mind are not one-way but interactive; 6. neither the brain nor the mind can be explained by mechanical causality -- bottom up causality is only partially mechanical and requires the employment of an analogy whereas top down causality escapes scientific explanation.

7. For a discussion of technical and pragmatic imperatives, see *Groundwork of the Metaphysics of Morals* AA IV: 416 ff. For Höffe's discussion of technical, pragmatic, and categorical imperatives in light of the distinction between the hypothetical and the categorical, see *Art of Living*, 16–21,

imperceptible, moral laws⁸ if we are to understand ourselves. Since there is no causality without order (this is a crucial lesson of dreams⁹), it comes as no surprise that the material domain of experience conforms to the laws of nature -- incidentally, laws that no other species appears to be able to grasp. However, it should also not surprise us that creative freedom also involves an order to which we must pay attention. In this latter case, though, the only order compatible with creative freedom is a self-imposed, moral order, not a blind, mechanical order.

For an adequate understanding of action, then, it is necessary that we acknowledge the presence and functioning of two causal *domains* with two lawful orders within the possible, unified *territory* of understanding of the one world or *field* of appearances. Since neither lawful order is accessible in the appearances both lawful orders depend upon us for their understanding. This is especially the case with the most complex level that is human action: the exercising of our freedom to create things that nature could never accomplish without us. There appears to be no other species that can begin to grasp these two domains with anything like the degree of sophistication already found in a child, not to speak of educated adults.

On Causal Explanations

The claim that Libet's "mind time" provides an explanation of human action is a claim proffering a causal account of action. Kant's famous assertion that Hume "woke him from his dogmatic slumber¹⁰" has nothing to do with Hume's defense of "refined skepticism¹¹" but everything to do with Hume's insight that we only perceive the effects of causes, not the causes themselves.

Hypothetical imperatives (technical and pragmatic) are demanded by particular, concrete situations whereas *categorical imperatives*¹² are grounded in *positive*¹³ freedom (i.e.,

8. For Kant's distinction between "field" (where cognition may or may not be possible, which would include, then, those appearances that we call dreams precisely because they don't conform to a causal order), "territory" (where cognition is possible), and "domain" (where concepts, rules, and laws can be legislated by consciousness to understand), see "II. On the domain of philosophy in general" in *Critique of Judgment* AA V:174-176.

9. Kant raises this theme in the *Critique of Pure Reason* B 520-521, in the *Prolegomena to any Future Metaphysics* AA 290-291 as well as in *Metaphysik Mrongovius* XXIX: 884 ff, 927.

10. Kant, *Prolegomena* AA III: 260.

11. See *Dialogues Concerning Natural Religion and the Posthumous Essays of the Immortality of the Soul and On Suicide*, ed. Richard H. Popkin (Indianapolis: Hackett Pub., Co., 1982), 9.

12. For a discussion of hypothetical and categorical imperatives, see *Groundwork* AA IV: 414-417.

13. This notion of "positive" freedom is not that from G.W.F. Hegel, Isaiah Berlin, Axel Honneth, Theo Kobush, and Charles Taylor. For these authors, "positive" freedom involves the limitation of the will in order to accomplish a greater "rational" end. It is the kind of freedom illustrated by the state requiring school attendance in order that the child and society can reach a larger benefit of an educated citizenry in the future. Such "positive" freedom is distinguished from "negative" freedom that insists that "No one can tell me what to do!," which consists in its extreme form of an ascetic withdrawal from the world. To the contrary, Kant defines "negative" freedom as "freedom from" the blind determination of physical causality and "positive" freedom as humanity's creative ability to act in conformity with physical causality but not as exhaustively determined by physical causality. (See "§8 Theorem IV" in *Critique of Practical Reason* AA IV: 33, and "Freedom! What's it good for?" at [https:// criticalidealism.org](https://criticalidealism.org))

the freedom to create things that nature on its own cannot) that is irreducible to any particular, concrete situation. Kant's ode to freedom is found in Section III of the *Groundwork of the Metaphysic of Morals*, but already in Section II he formulated the crucial question with respect to this extraordinary causal capacity: "Who can prove by experience the nonexistence of a cause when all that experience teaches is that we do not perceive it?"¹⁴

Hume's recognition of the limits to our ability to provide causal explanations for objective phenomena did not lead to his succumbing to "vulgar" skepticism's¹⁵ universal suspicion of any and all knowledge but, rather, to embrace "refined" skepticism's proportioning of its assent to the degree of empirical evidence. This is the strategy of *Critical Realism* that compensates for our unknowing by asserting that the cause *must be* the way we take it to be although we can never perceive it.

In contrast, Kant's *Critical Idealism* involves the Copernican Turn to examine the limits of reason in an attempt to establish what the necessary subjective, *conditions and capacities* are for us to experience a world of appearances as we do rather than to focus on mere *content and causal claims* about objective phenomena (*Critique of Pure Reason* B xvii). After all, the Copernican Turn requires denying our senses. In other words, the "vice" of skepticism about objective knowledge is a "virtue" since it doesn't end with what we can't know but by means of methodological skepticism confirms *what we can know to be necessary* for us to experience and to act in the world – even contrary to our senses.¹⁶

What Strategy Confirms Causal Explanations?

When it comes to causal explanations, then, we are concerned with what one might conclude is a pernicious limit. Given that we can only experience the effects of causes and never the causes themselves, we might believe we can only choose between vulgar and refined skepticism. The former eliminates all knowledge whereas the latter can only be convinced that it is approximating an objective reality that it cannot reach. Yet, conviction is no confirmation!

What do brain scan fMRIs show us? They show us the effects of some cause(s) present in the brain at a particular moment in time. However, the attempt to invoke them as proof that our actions are caused by physical processes in the brain involves a profound paradox:

Descartes pointed out at the end of Meditation II that "perception is a sequence of mental judgments."¹⁷ In other words, we cannot get outside of the mind to determine whether or not physical phenomena are the way we take them to be. As a consequence, the attempt to *prove* that our mental experience is the consequence of physical events is an attempt to explain our mental experience by means of something not mental (the physical

14. Kant, *Groundwork* AA IV: 419.

15. For Hume's discussion of vulgar skepticism, see *Dialogues Concerning Natural Religion*, 5, 8.

16. Kant calls this "methodological skepticism." See *Critique of Pure Reason* B 451, B 513-514, B 535, B 767.

17. René Descartes, *Meditations on First Philosophy in Which the Existence of God and the Distinction of the Soul from the Body Are Demonstrated*, trans. Donald A. Cress, reprint, 1641 (Indianapolis: Hackett Publishing Co., Inc., 1983), 20–23.

brain) even though we can't get outside of mental experience to prove that brain activity accounts for all of mental experience.

Although such skeptical limits can be taken as devastating to any and all knowledge by establishing what *we can't do*, they can be taken to indicate those things that must be necessary that *we can do*.

Our physical, causal explanations reach their highest validity to the degree that we can duplicate the conditions and maintain a control group for phenomena. Yet, little of our actual experience allows for the satisfying of such rigorous conditions. When it comes to our own creativity, we can point to its products, but we have no empirical evidence of this causality any more than we do of any other form of causality. The validity of creative freedom comes down to its practical value (not technical or pragmatic value!). Were we to deny our negative freedom-from nature and positive freedom-for creativity, we would not be human -- and that would be established long before the issue of sociability through technical and pragmatic imperatives could emerge.

Rather than merely assert or deny morality on the basis of empirical evidence (fMRIs or *consequences* of our actions), the Copernican Turn to examine the conditions of possibility of our experience illuminates an extraordinary causal capacity that is incapable of being proved by any *objective* reality either on earth or in heaven¹⁸ but confronts us with the self-demand to assume responsibility for this causal agency. We are free, moral beings not because we *must* be but because we *can* be!

Refined Skepticism's Seduction

Affirmation of the limits to our ability to establish unequivocal, causal explanations of events is no plaidoyer for denying physical causes. It is merely the identification of the ground for accepting a form of causality that is inseparable from, but also irreducible to, physical causes.

Nonetheless, we would not be able to experience the irreducible causality of creative freedom without a physical world. This is why Kant frequently insists that any causal explanation of an event should begin with seeking out the physical causes involved as rigorously and thoroughly as possible (methodological determinism).¹⁹ If we can never be

18. Kant writes: "... we see philosophy put ... in a precarious position, which is to be firm even though there is nothing in heaven or on earth from which it depends or on which it is based. Here philosophy is to manifest its purity as sustainer of its own laws, not as herald of laws that an implanted sense or who know what tutelary nature whispers to it, all of which ... must have their source entirely and completely a priori, and, at the same time, must have their commanding authority from this: that they expect nothing from the inclination of human beings but everything from the supremacy of the law and the respect owed it or, failing this, condemn the human being to contempt for himself and inner abhorrence." (*Groundwork* AA IV: 425-426). This „precarious position“ is crucial for understanding the famous opening line of Kant's *Groundwork*: "It is impossible to think of anything at all in the world, or indeed even beyond it, that could be considered good without limitation except a good will." (*Groundwork* AA IV: 3937)

19. See *Critique of Judgment* AA V: especially, 387 and 418; see also 383, 415, .

certain that our physical, causal explanations are correct, what would it mean to establish physical causes for events?

It means, that the physical cause is something that we must *add to the phenomena*. Yet, this is no invitation to add just any and all causal explanations. Here is where certain other necessary presuppositions become essential: Among other “pure²⁰ ideas” of reason, we must assume that the physical world consists of a coherent totality (see *Critique of Pure Reason*, B 536-537) of physical laws, which govern physical events.

As we have seen, we can identify such physical laws by means of the rigor of the scientific method. Nonetheless, both the expense of such experiments as well as the relatively limited occasions that allow for control groups and repeatability mean that we must depend upon the (moral) professionalism of labs that perform such experiments.

Only Critical Idealism, not Critical Realism, explicitly embraces the conditions of such a research project since it is driven by what we can do, not what we can't do. We can (!) establish that the understanding of physical events requires that they conform to laws, and we can develop strategies for determining which laws are appropriately added to the phenomena in order to understand them. However, as Kant pointed out, this means that the natural sciences are engaged in an open-ended process of causal determinations that are ever subject to revision.²¹ It is in this context that we best view Kant's claim that it never occurred to him to doubt the existence of the physical world.²² This is a strategy that approaches the physical world *as if* it were governed by such laws; it does not involve the claim for indubitable evidence that the laws we attribute to nature are provable.

Nonetheless, just as physical laws constitute an ever expanding body of causal explanations for physical events, they do not exclude the role of an efficient causality of another order. Here, though, the very necessary conditions under which we experience this extraordinary, efficient causality of creative freedom rein in our speculations. Whereas the indication that we possess this extraordinary causality comes from our own actions, once one crosses the threshold to a non-physical, efficient causality, one could argue that the doors are thrown open to accepting a divine causality capable of ignoring both physical laws and our creative freedom. Although a possibility that can never be disproved (or proved!), were we to accept the notion of divine causality capable of ignoring the laws of nature, we could never have confidence that our understanding of physical events was anywhere nearly adequate since we would never be able to know when such a divine exceptionalism was occurring. Furthermore, were this divine causality able to assist our creative freedom in any fashion, it would undermine that very freedom. For example, we would no longer be primarily

20. A *pure* idea is nothing metaphysical in the sense of Transcendental Realism (e.g. Platonism). To be sure, such *pure* ideas are incapable of verification or falsification in the senses, but their *a priori* necessity is demanded by the appearances, not imposed by a metaphysical reality independent of appearances. (See *Critique of Pure Reason* B 74 as well as B 34-35.) Precisely because of this, *pure* ideas require a “deduction” rather than factual “proof.” (See *Critique of Pure Reason* B 117.)

21. This is the clear rejection of any and all claims that Kant was “trapped” in a Euclidian/Newtonian universe as, for example, Alasdair MacIntyre maintains. See the “Postscript” to Alasdair MacIntyre, *After Virtue: A Study in Moral Theory* (Notre Dame, Indiana: University of Notre Dame Press, 1981).

22. See *Prolegomena*, AA III: 294, 336.

concerned to do the right thing because it is right, but we would be more likely concerned to seek the favor and assistance of this divine agent (i.e., to act out of self-interest).

In short, the recognition of our limits as well as our dependence upon causes that we can neither prove nor disprove does not leave us clueless. Our very limits (!) establish the necessary conditions for us to understand and act responsibly in the world while requiring us to rein in our speculations about any supernatural causality. Yet, our own supersensible (not supernatural) causality can only act successfully in conformity with physical causality.

There is one world (universe) of appearances, and that world teaches us that the conditions of understanding (i.e., rationality) require that we understand those conditions to be universal (there is “one reason²³”) as well as require the acknowledgment of two domains in which we provide (but do not create) the rules: nature and freedom.

Dogmatic and Methodological Determinism

We now have a framework for Otfried Höffe’s distinction between dogmatic and methodological determinism.²⁴ Dogmatic determinism denies skepticism and insists that there is only one form of causality, physical causality, and freedom *must be* eventually accounted for by means of a unitary causal system of explanation.²⁵

Such causal reductionism insists on unity at an inappropriate level of experience. What is unitary to experience is not causes but appearances. We can only perceive appearances.²⁶ Their causes are multiple (although not unlimited, as we have seen) even as they constitute one, indivisible set of appearances.

Furthermore, it is precisely because there is a difference between appearances and “things-in-themselves” that makes it possible for us to speak of the *necessity* of creative freedom if we are to understand and to act in a world of appearances.

Rather than insist upon dogmatic determinism that accepts only a uniformity of causal explanation, Höffe suggests that we are better served by a methodological determinism. This requires that we approach our explanations of events first and foremost *as if* governed exclusively by physical laws since any experience we can have is dependent upon the order of nature. Methodological determinism, however, is complementary to methodological

23. See the *Metaphysics of Morals* AA VI: 207.

24. See “18.1 Methodological or Dogmatic Determinism” in *Art of Living*, 219–24.

25. There is no stronger representative of such a causal monism than John Searle. He claims that there are no “causal gaps” in nature (see *Freedom & Neurobiology: Reflections on Free Will, Language, and Political Power* [New York: Columbia University Press, 2007], 46, 59, 63) and that we only experience the illusion of freedom (actually “free will” or “choice;” not creativity) as a consequence of an experienced “causal gap” (see *ibid.*, 42-43, 46, 51, 55, 73-74) that in principle at least is capable of being closed once we have the appropriate grasp of nature.

26. In the *Critique of Pure Reason* B 75, Kant insists that concepts without appearances are empty whereas appearances without concepts are blind. This is no trivial observation but is frequently invoked and central to Kant’s entire project. See B87, A 95, B148, B 267, B 295, B 298, B 314, A, 349, B 517, B 649?, B 667, B 707, B 730, B636, B474, B 6798.

skepticism. Methodological skepticism shifts our epistemological focus from content claims to conditions of possibility that are necessary for any and all understanding. Methodological determinism assumes that events are first and foremost explicable by means of physical, causal necessity. However, methodological determinism leaves open the invocation of the extraordinary, efficient causality of personal creativity to account for certain events. It is this openness of methodological determinism that not only allows for, but requires, our adherence to a *categorical* moral order.

Persons and Their Minds: Moral Responsibility

We have identified two domains in which we must provide (but not create) rules: nature and freedom. These two domains do not constitute an ontological dualism but a phenomenological monism. Our experience is universally of appearances, and humanity must supply the causal explanations for those appearances.

Dogmatic and methodological determinism insist that there is no causality without order, and our two domains involve two irreducible orders: a physical and a moral order. The physical order is distinguishable from creative freedom to the extent that the physical order functions blindly and mechanically. The only order compatible with the efficient causality of freedom is an order capable of being autonomously self-legislated rather than heteronomously imposed from without (either physical or metaphysical). It is in this sense, then, that the moral order is not heteronomous but autonomous. In other words, autonomy is not libertarianism that is defined by independence from society or tradition. Autonomy is concerned with the degree to which our causal capacity rises above nature!

The autonomy of the moral order, however, does not allow us to legislate just any and all moral principles to govern our actions. How would we go about legislating moral principles, which are right because they are right independent of self-interest, to govern our actions without a heteronomous codification of moral principles or succumbing to self-interest?

In Section II of the *Groundwork*, Kant does not provide a list of heteronomous moral principles but, he does provide three formulations of the *categorical imperative* to aid in the self-legislation of a principle to govern one's actions and to check-mate the exclusive pursuit of *hypothetical* (i.e., situation driven) *self-interest*. The first, "universal law" version does not require proof that our moral principle is universal for that would turn the autonomous, categorical imperative into a heteronomous imperative. Rather, 1) the "universal law" version, "*act as if [!] the maxim of your action were to become by your will a universal law of nature,*²⁷" is a strategy to call all self-interest into question.²⁸ Kant explicitly acknowledges

27. Kant, *Groundwork* AA IV: 421

28. Kant wrote: "... the *principle* of every human will as a will giving universal law through all its *maxims*, provided it is otherwise correct, would be very *well suited* to be the categorical imperative by this: that just because of the idea of giving universal law *it is based on no interest* and therefore, among all possible imperatives, can alone be *unconditional*; or still better ..., if there is a categorical imperative (i.e., a law for every will of a rational being) it can only command that everything be done from the maxim of one's will as a will that could at the same time have as its object itself as giving universal law; for only then is the practical

in the opening of Section II of the *Groundwork* that we can never be certain that we have eliminated self-interest in the selection of our moral principles, but we can make the issue a conscious part of our invocation of moral principles to govern our actions. The other two versions of the categorical imperative are analogous: 2) “*So act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means.*”²⁹ It is not possible for us to be absolutely certain that we are not allowing ourselves or treating others as a means, but we can make the issue of treating ourselves and others exclusively as ends a conscious part of our invocation of moral principles to govern our actions. 3) “... the idea of the will of every rational being as a will giving universal law.”³⁰ Here, we not only have the ground for any and all human dignity (and not value/price which is a category of exchange in the marketplace whereas the individual’s creative freedom is incapable of exchange by anything else³¹), but we also have a strategy for reducing the likelihood that we will attempt to legislate for the other what moral principles he should legislate for her-/himself. Combined, these three versions of the categorical imperative provide beneficial strategies for the individual to properly select the *categorical* moral principles to govern her/his extraordinary, efficient causality.

Categorical and not Merely Hypothetical Imperatives

Patricia Churchland as well as other proponents³² of neuroethics and evolutionary morality insist that morality emerges as a crucial survival strategy over the course of evolution. Surely the attractiveness of neuroethics and evolutionary morality is its emphasis upon humanity’s inseparability from the natural order. However, the suggestion that the cultivation of social skills constitutes morality involves cutting the tap-root of morality and reducing moral principles to *hypothetical* imperatives.

It is surely the case that there is a “right” and a “wrong” way, for example, to build automobiles, as well as a “right” and “wrong” way to interact with others in social networks both narrowly and broadly defined and to pursue a career (*pragmatic imperatives* of personal welfare). Such *technical* and *pragmatic* imperatives (necessities), however, are *hypothetical*. They depend upon a particular circumstance and set of external conditions for them to be manifest much less for us to conform to them. As much as they involve necessary rules that govern behavior and, thereby, demonstrate that an individual is predictable and to be trusted, they do not constitute a *moral ought*.

principle, and the imperative that the will obeys, unconditional, since it can have no interest as its basis.” *Groundwork* AA IV: 432.

29. Kant, *Groundwork* AA IV: 429.

30. Kant, *Groundwork*, 39.

31. See *Groundwork* AA IV: 431.

32. See Manfred Spitzer, *Das Wahre, Schöne, Gute. Brücken zwischen Geist und Gehirn* (Stuttgart: Schattauer GmbH, 2009), Searle, *Freedom*, Richard Dawkins, *The Selfish Gene* (New York: Oxford University Press, 1976), and Martin A. Nowak, Corina E. Tarnita, and Edward O. Wilson, “The Evolution of Eusociality,” *Nature* 466 (26 August 2010): 1057–62. Churchland ignores the “kin selection”/“eusociality” debate at the core of evolutionary ethics today. Her emphasis on brain regions, chemistry, and hormones is assumed to account for ethical social behavior rather than eusociality’s claim that social behavior itself plays a role in the development of ethical behavior. Kin selection seeks to give a “purely” biological explanation of evolutionary ethics whereas “eusociality” opens the door to human creativity in addition to a biological basis for evolutionary ethics. In any event, skepticism raises its head in this debate.

Churchland insists that “[m]oral values ground ... a *social* life. At the root of human moral practices are ... social desires; most fundamentally, these involve attachment to family members, care for friends, the need to belong³³” and that “caring is a ground-floor function.³⁴” Social skills that anchor morality are: “Courage in defense, cunning in the hunt, honesty in transactions, tolerance of idiosyncrasies, and willingness to reconcile ...³⁵” Furthermore, Churchland points out that “altruistic punishment” in the sense of a negative emotion directed toward non-contributors (defectors)³⁶ as well as one’s concern for one’s personal reputation are “... important in emerging patterns of cooperation and punishment ...³⁷”

Churchland not only reports that neuroscience is capable of locating *the capacity* for such social skills in the “higher” brain functions of mammals but also claims that neuroscience offers an *explanation* (!) of moral behavior precisely because important aspects of social skills are correlated with brain regions (for example, the prefrontal cortex, amygdala, the limbic structures, and the brain stem) and hormones (particularly, oxytocin [OXT], arginine vasopressin [AVP], and dopamine). Furthermore, she claims that any sense of “innateness” *must* be explainable by genes.³⁸ Especially the prefrontal cortex is crucial when it comes to the “... capacity to predict, both in the social and the physical domain ... to capitalize on those predictions by deferring gratification and exercising self-control.³⁹” She points out that all of these social skills find their correlation in brain functions:

Almost certainly social behavior in mammals depends on genes for oxytocin (OXT) oxytocin receptors (OXTR), vasopressin (AVP) endogenous opiates, dopamine, and dopamine receptors, serotonin and serotonin receptors, as well as genes involved in the development of circuitry such as that supporting the extensive pathways of the vagus nerve through the body.⁴⁰

She concludes:

... given normal neural networks, the pain from being shunned and the pleasure of belonging, along with imitation of those we admire, give rise to

33. Patricia Churchland, *Braintrust: What Neuroscience Tells Us about Morality* (Princeton: Princeton University Press, 2011), 12.

34. Churchland, *Braintrust*, 30.

35. Churchland, *Braintrust*, 103.

36. Churchland, *Braintrust*, 83.

37. *Braintrust*, 85. We are unable to develop this theme here for want of space, but Churchland’s “sociability” is what Kant calls the “humanity,” one of three constitutive, not arbitrary, *Anlagen* (capacities) possessed (although not necessarily equally exercised) by all human beings. The other two are “animality” (i.e., satisfaction of physical appetites) and “personality” (i.e., acting on a moral principle without regard to self-interest). “Humanity” is the capacity to seek status and prestige in the eyes of others (i.e., honor), and, precisely because it takes its maxims from its social world, it is governed by self-interest, not morality. See “I. Von der ursprünglichen Anlage zum Guten in der menschlichen Natur” in *Religion within the Boundaries of Mere Reason* AA VI: 26-28.

38. Churchland, *Braintrust*, 104–05.

39. Churchland, *Braintrust*, 118.

40. Churchland, *Braintrust*, 102.

powerful intuitions about the absolute rightness or wrongness of classes of behavior. This scheme of responses, much of which takes form during brain-gene-environment interactions as the child begins to live its social life, is the neurobiological reality behind our talk of *conscience*. Unhitched from the neurobiology of sociality and social learning, however, conscience, as a *metaphysical* entity with moral knowledge, loses its footing.⁴¹

To be sure, Churchland calls for the exercise of caution when it comes to conclusions regarding the simplistic reduction of morality to brain function and insists that we remain aware of the limitations of fMRIs.⁴² Nonetheless, she betrays her dogmatic determinism when she writes that although “[t]he precise nature of the role of the endogenous opiates, and their interactions with other hormones such as prolactin, and with OXT and AVP, remains to be worked out, ... the core of the story -- that receptor density for OXT and AVP is associated with attachment -- draws some of the mystery out.⁴³ She remains confident that the core story although at the moment incomplete will be developed into an explanation:

Unfortunately, the mechanisms whereby the neuronal circuits in the frontal cortex perform this array of functions are not yet well understood, though neuroscientists have unearthed some essential elements ... Anatomists have shown that the prefrontal structures are densely connected to evolutionarily older subcortical structures such as the amygdala, hypothalamus, basal ganglia, and nucleus accumbens, and are closely tied to emotions, feelings, sensation, drives, and the general state of the body. A new anatomical technique, *tensor diffusion imaging* (TDI), is particularly advantageous in this study ...⁴⁴

The neurobiology of social skills, and in particular the nature of the capacity to attribute mental states to others, is a young but vigorous field. The coevolution of psychology and neuroscience will doubtless bring new knowledge along with many surprises to this area of research in the next decade.⁴⁵

Surely no one will doubt that social skills are valuable for “successful” communities, but there is nothing about Churchland’s list and neuroscientific account for their correlation in brain activity that would allow us to distinguish a “virtuous” from a “non-virtuous” community. **Every Mafia, drug cartel, or street gang would embrace this account of “morality.”** Although social skills contribute to the success of communities and to predictable behavior,⁴⁶ the mere presence of these social skills is no guarantee of virtue. We must look elsewhere than particular social situations and behavior to obtain an understanding of morality.

41. Churchland, *Braintrust*, 192–93.

42. Churchland, *Braintrust*, 124.

43. Churchland, *Braintrust*, 55.

44. Churchland, *Braintrust*, 119–20.

45. Churchland, *Braintrust*, 162.

46. For Churchland “Theory of Mind means enhanced prediction and explanation of self and others.” *Braintrust*, 134.

Social skills are *hypothetical* precisely because they are *necessary for the successful negotiation of a particular circumstance*. The necessities here, as we have observed, are technical and pragmatic, but they are not moral (*categorical*). However, the identification of a principle as “*right because it is right*” requires the *regulative idea of freedom* as the categorical origin (i.e., non-physical origin) of the moral principle. One has the conditions necessary for morality only where it is appropriate to speak of a capacity to create something that nature cannot accomplish on its own. Even then, though, the capacity alone does not result in morality.

Practical reason (morality) is concerned with the self-legislation of principles to govern one’s action that are (or at least can be) not only independent of one’s social location but also not reducible to physical causality. Moral principles are analogous to the physical law of gravity. They apply (or *ought to apply*) everywhere and at all times.

Just as the civic law cannot guarantee justice and is dependent upon its citizenry to self-legislate moral principles to govern adherence to the civic law, so, too, the proper exercise of *technical and pragmatic necessities* are dependent upon their practitioners to self-legislate moral principles to govern their application. Both the civic law and technical and pragmatic necessities are *hypothetical* (i.e., situation bound) whereas the moral order is *categorical* (i.e., invokes principles that are right because they are right) -- independent of self-interest.

The suggestion that the categorical as a non-physical, “innate” capacity avoids the “naturalistic fallacy” only by constructing a “mystical moat around moral behavior⁴⁷” by eliminating science from being capable of telling us anything “... fundamental about what is good or valuable,⁴⁸” or, even more absurdly, the suggestion that the categorical involves the “disembodiment of reason” and is, hence, “irresponsible,⁴⁹” constitutes a straw-man argument for a position that no one (surely, not Kant) defends. **Not only is Churchland’s instrumental reason senseless without a physical world, but also there would be no transcendental reason in the Critical Idealist sense without a physical world**, as we saw above (footnote 26). Were there not a physical world of appearances, it would never occur to us to search for the conditions of possibility for us to experience it, but also we would have no notion of *creative* freedom since the latter’s positive character is encountered only through its negative character (i.e., freedom is a causality not reducible to -- *but also never independent from* -- natural causality).

We cannot be human without brains and minds. Nonetheless, we do not have to choose between these two domains and causal systems for an explanation of morality. Rather than a metaphysical, substance dualism, we are concerned with one world of appearances to which we add multiple causal explanations, which in no way fragments our world. An adequate theory of action and methodological determinism allows us to see far beyond the illuminated, colored images of fMRIs and of neuroethics’ sociability to give us an account of

47. Churchland, *Braintrust*, 187.

48. Churchland, *Braintrust*, 188 Churchland betrays her restricting of morality to hypothetical, technical and pragmatic imperatives in her discussion of Moore: “Using science to help figure out what we *ought* to do to be healthy will, on this Moorean view, be unrewarding, since that is an ‘ought’ project’ -- a normative, not a factual project.” Again, technical and pragmatic imperatives are *not moral imperatives*.

49. Churchland, *Braintrust*, 165–66.

our experience that identifies our extraordinariness as possessors of an efficient causality found in its complexity nowhere else in nature, as far as we can know. However, this is an account of human moral agency that does not argue that we *must be* moral; it argues that we are moral beings because we *can be*.

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