

Pulses of Emotion: Whitehead's "Critique of Pure Feeling"

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According to Alfred North Whitehead, "the basis of experience is emotional" (1933/1967, 176). Whitehead writes that his philosophy "aspires to construct a critique of pure feeling, in the philosophical position in which Kant put his *Critique of Pure Reason*. This should also supercede the remaining *Critiques* required in the Kantian philosophy" (1929/1978, 113). In what follows, I would like to work through this "critique of pure feeling," and show how Whitehead opens the way to an affect-based account of human (and not just human) experience. For Whitehead, the questions of how we feel, and what we feel, are more fundamental than the epistemological and hermeneutical questions that are the focus of most philosophy and criticism (including Kant's *Critiques*). This emphasis upon feeling leads, in turn, to a new account of affect-laden subjectivity. Most broadly, Whitehead's affect theory places aesthetics – rather than ontology (Heidegger) or ethics (Levinas) – at the center of philosophical inquiry. Aesthetics is the mark of what Whitehead calls our *concern* for the world, and for entities in the world (1933/1967, 176).¹

¹In what follows, I will use the terms "feeling", "emotion", and "affect" pretty much interchangeably. This is in accordance with Whitehead's own usage. Nonetheless, I remain mindful of Brian Massumi's (2002) crucial distinction between *affect* and *emotion* (27-28 and *passim*). For Massumi, affect is primary, non-conscious, asubjective or presubjective, asignifying, unqualified, and intensive; while emotion is derivative, conscious, qualified, and meaningful, a "content" that can be attributed to an already-constituted subject. I think that this distinction is relevant for Whitehead as well, but he does not mark it terminologically. As I will argue, Whitehead's "feeling" largely coincides, in the first instance, with Massumi's "affect." Whitehead goes on, however, to give a genetic account of how, in "high-grade" organisms such as ourselves, something like "emotion" in Massumi's sense arises out of this more primordial sort of feeling.

For Whitehead, the great accomplishment of Kant's Copernican Revolution in philosophy is its "conception of an act of experience as a constructive functioning" (1929/1978, 156). That is to say, Whitehead credits Kant with originating philosophical constructivism.² Kant denies the possibility (or even the meaningfulness) of knowing "things in themselves," and points instead to the ways that we are always already constructively involved with whatever it is that we experience or observe. That is to say, Kant rejects the notion of representing, in our minds, a reality that would simply exist *out there*, by itself, independent of and prior to our experience of it. For our observation of the world, or of anything in the world, is a process that interacts with, intervenes in, and changes the nature of, whatever it is that we are observing. In this way, our subjective experience of the world is itself the reflexive process through which the world, including ourselves, gets constituted. For Whitehead, as for Kant, there is no possibility of knowing the world non-subjectively or extra-experientially, *sub specie aeternitatis*. For "the whole universe consists of elements disclosed in the experiences of subjects," and nothing else (166). As a constructivist, Whitehead is very much a Kantian, or post-Kantian, thinker – rather than the pre-Kantian throwback that he is sometimes taken to be.

Even Kant's notorious doctrine of "things in themselves" is a consequence of his constructivism. For the very point of Kant's insistence upon the existence of "things in themselves" that we cannot know or describe, but whose unknowability and ungraspability we are nonetheless obliged to affirm, is that objects subsist be-

²My sense of Whitehead as a constructivist philosopher comes from Isabelle Stengers' great book on Whitehead (2002). For Stengers, philosophical constructivism is non-foundationalist: it rejects the notion that truth is already *there* in the world, or in the mind, independent of all experience and just waiting to be discovered. Instead, constructivism looks at how truths are *produced* within experience, through a variety of processes and practices. This does not mean that nothing is true, or that truth is *merely* subjective; but rather that truth is always embodied in an actual process, and that it cannot be disentangled from this process. Human subjectivity is one such process, but not the only one. Constructivism does not place human cognition at the center of everything, because the processes that produce and embody truth are not necessarily human ones. For Stengers, as for Bruno Latour (2005), the practices and processes that produce truth involve such "actors" as animals, viruses, rocks, weather systems, and neutrinos, as well as human beings. Constructivism also does not imply relativism; in a phrase that Stengers borrows from Deleuze and Guattari, constructivism posits "not a relativity of truth, but, on the contrary, a truth of the relative" (Stengers 2006, 170, citing Deleuze and Guattari 1994, 130). In insisting upon the truth of the relative, and upon nonhuman agents in the production of this truth, constructivism is ultimately a realism, in contrast to the anthropocentrism and antirealism of so much postmodern, and indeed post-Kantian, philosophy.

yond the limited and incomplete ways that we are able to grasp them. The given always exceeds our representations of it. Our constructions are always provisional and ongoing. Our thoughts and actions cannot shape the world all by themselves. Our mental processes or forms of representation are always limited, always compelled to confront their own limits.³ Though Whitehead is not directly concerned with the question of limits, he similarly reminds us that no metaphysical system is ever complete. “In its turn every philosophy will suffer a deposition,” he says – including his own (7). More immediately, every prehension⁴ involves a particular selection – an “objectification” and an “abstraction,” (160) – of the “data” that are being prehended. Something will always be missing, or left out. There is nothing outside “experience as a constructive functioning”; but experience itself is always partial (in both senses of the word: *incomplete*, and *biased*).

Whitehead nonetheless criticizes Kant – as he criticizes other philosophers of the sixteenth through the eighteenth centuries – for exhibiting an “excess of subjectivity” (15). Kant simply claims too much for the mind. He unduly privileges those particular sorts of abstraction that are peculiar to human beings and other “high-grade” organisms (172). According to Kant, our minds actively shape experience by structuring it according to what he calls the “concepts of understanding,” or Categories. “There can be no doubt that all our cognition begins with experience,” Kant (1996) writes. “But even though all our cognition starts *with* experience, that does not mean that all of it arises *from* experience” (43-44). For Kant, the Categories of the understanding cannot be *derived* from experience – even though they can only be legitimately applied *within* experience. In referring

³Kant refuses, as it were in advance, Hegel’s intellectualizing move, which consists in shifting the ground “from epistemological obstacle to positive ontological condition,” so that “our incomplete knowledge of the Thing [in itself] turns into a positive feature of the Thing which is in itself incomplete, inconsistent” (Zizek 2006, 27). For Hegel, Kant fails to see that, in positing limits, he is at the same time affirming the power of the mind, or Spirit, as that which performs this positing. But when Kant proclaims the limits of thought, he is precisely insisting upon the radical exteriority of objects to the ways that we cognize them. He thereby disqualifies the sort of self-aggrandizing, self-reflexive move that Hegel makes. The incompleteness of our understanding of the Thing cannot be posited as a feature of the Thing (in) itself. The limits of cognition cannot themselves be cognitivized. In positing limits in this radical sense, Kant opens the way (despite his own cognitive bias) towards a sense of relations that are pre-cognitive and affective. But when Hegel transforms the pre- and non-cognitive into negative cognition, and cognition of the negative, he leaves no room for affect. The relation of Kant to Hegel merits more extended discussion.

⁴*Prehension* is one of Whitehead’s basic philosophical terms. A prehension is any grasping or sensing of one entity by another, or response of one entity to another: whether this takes the form of a stone falling to the earth, or of my looking at an object in front of me.

the Categories to “our *spontaneity* of cognition” (106), Kant in effect reaffirms the *cogito*: the Cartesian subject separated from, unconditioned by, and implicitly superior to the world that it only observes from a distance. Though Kant, in the “Paralogisms of Pure Reason,” demolishes any substantive claims for the Cartesian ego, he nonetheless retains that ego in the ghostly form of the “transcendental unity of apperception” that accompanies every act of cognition. In this way, Kant risks limiting the scope of his own discovery of constructivism. “Experience as a constructive functioning” is reserved for rational beings alone. At the same time, those beings are not themselves vulnerable to the vagaries of such experience. Kant’s subject both monopolizes experience, and exempts itself from immersion in that experience.

Whitehead, like many post-Kantians, rejects this exemption or separation.⁵ For constructivism to be complete, the human or rational subject cannot be specially privileged. And the transcendental presuppositions of experience must themselves arise – immanently, contingently, and historically – from *within* experience. Even Kant’s basic “form of intuition,” Whitehead (1929/1978) says, must be “derived from the actual world *qua datum*, and thus is not ‘pure’ in Kant’s sense of that term” (72). In line with this, the transcendental presuppositions of experience must be processes, rather than fixed logical categories. And they cannot be attributed to the “spontaneity” of a subject that would already be in place. “For Kant,” Whitehead says, “the process whereby there is experience is a process from subjectivity to apparent objectivity.” But Whitehead’s own philosophy “inverts this analysis, and explains the process as proceeding from objectivity to subjectivity” (156). The subject emerges from experience, rather than being presupposed by it. Also, the “subjective unity” of any given act of experience does not pre-exist that experience, but is itself only produced in the course of its unfolding.⁶ Whitehead thus replaces Kant’s “transcendental idealism” – his “doctrine of the objective world as a construct from subjective experience” – with something

⁵As Deleuze (1983) puts it, the post-Kantians “demanded a principle which was not merely conditioning in relation to objects but was also truly genetic and productive. . . . They also condemned the survival, in Kant, of miraculous harmonies between terms that remain external to one another” (51-52).

⁶Whitehead works this out in the form of what he calls “The Category of Subjective Unity” (26; 223-225). More generally, all of Whitehead’s Categories are “empirico-ideal” transformations of Kant’s synthetic *a priori* notions. The entire question of “subjective unity” as a transcendental condition, and how Whitehead transforms it from a necessary presupposition into a “Categorical Obligation” (26) – or what I would want to call a postsupposition – merits more extended discussion.

more on the order of William James' "radical empiricism," or of what Deleuze will later call "transcendental empiricism."⁷

The important thing for Whitehead about Kantian "critique," therefore, is neither its determination of the limits of reason, nor its deduction of the concepts of understanding, but rather its constructivist account of the conditions of receptivity, or sensibility. That is to say, Whitehead rejects Kant's "Transcendental Logic," according to which "ordered experience is the result of schematization of modes of *thought*, concerning causation, substance, quality, quantity" (113). But he largely accepts the "Transcendental Aesthetic," in which Kant gives his "exposition" of space and time. This rendering of "the rules of sensibility as such" (Kant 1996, 107) is, for Whitehead, "a distorted fragment of what should have been [Kant's] main topic" (1929/1978, 113). Kant's great discovery in the "Transcendental Aesthetic" is that space and time are "constructs," in opposition to "the Newtonian 'absolute' theory of space-time" (70-72); but also that space and time, *as* constructs, are acategorical and non-conceptual.⁸ Space is "an a priori *intuition*, not a *concept*," Kant reminds us (1996, 79). Time, similarly, "is not a discursive or, as it is called, universal concept; rather, it is a pure form of sensible intuition" (86). This is why time is "nothing but the form of inner sense... the formal a priori condition of all appearances generally" (88). Space and time are immanent conditions of sensible intuition: they indicate the *ways* in which we *receive* the "data" that objects provide to us, rather than being logical categories to which the objects providing such data are themselves compelled to conform. Because they are merely forms of reception, space and time are not adequate for cognition. Indeed, Kant says that space and time are "sources of cognition" (92), in that nothing can be cognized apart from them. But space and time still come *before* cognition; they are not in themselves enough to ground or authorize it.

This is why Kant, with his demand for adequate cognition, moves on from the "Transcendental Aesthetic" to the "Transcendental Logic." Kant's great mistake,

⁷It is crucial to remember that, despite these critical revisions of Kant, Whitehead nonetheless maintains that "the order [from subjectivity to objectivity, or from objectivity to subjectivity] is immaterial in comparison with [Kant's] general idea" of experience as "constructive functioning," which is the really important thing (156).

⁸Kant is often taken, even by Whitehead, as having sought to "save" Newtonian physics and Euclidean geometry by giving them an *a priori* grounding. But I agree with Kojin Karatani (2003, 63) that, in fact, "just the opposite is closer to the truth." As Karatani shows, the whole point behind Kant's discussion of time and space, and the mathematics of time and space, is to show that these are synthetic conditions, rather than analytic logical necessities, and hence that they actually need to be constructed, and cannot simply be taken for granted, or presupposed (55-63).

according to Whitehead (1929/1978), is to accept Hume's founding assumption: a complete atomism of subjective sensations, or "the radical disconnection of impressions *qua data*" from one another (113). For Hume, "the primary activity in the act of experience is the bare subjective entertainment of the datum, devoid of any subjective form of reception" (157). Kant's aim, in the *Critique of Pure Reason*, is to avoid the skeptical consequences of this position. But Kant never questions the premise of starting out with the chaos of "*mere sensation*"; he only tries to show how this chaos can be ordered, and its elements connected, in a more satisfactory way than Hume was able to accomplish. Hume offers nothing but mere habit as an explanation for the basic stability of experience. In Kant's account in the "Transcendental Logic," the understanding, with its Categories, forcefully imposes a conceptual order upon an otherwise disconnected and featureless flux of individual impressions. In resolving the matter in this way, Kant relies exclusively upon "the higher of the human modes of functioning," and ignores the more "primitive types of experience" (113). He retains what Whitehead criticizes as "the overintellectualist bias prevalent among philosophers" (141).

By ordering experience as he does in the "Transcendental Logic," Kant remains within the tradition – stretching back at least to Aristotle – of what Gilbert Simondon (2005) calls *hylomorphism* (45-60). This is the dualism of form and matter. Hylomorphism presumes that materiality, or the "sensible" (that which can be apprehended by the senses alone), is passive, inert, and intrinsically shapeless, and that it can only be organized by an intelligible form that is imposed upon it from outside, or from above. Simondon argues that hylomorphism, with its rigid dualism, ignores all the *intermediaries* that are at work in any actual process of formation or construction. In fact, matter is never entirely passive and inert, for it always contains incipient structures. Matter already contains distributions of energy, and potentials for being shaped in particular directions or ways. (It's easier to plane a piece of wood if you work in the direction of the grain, rather than across it – cf. Massumi 1992, 10). For its part, form is never absolute, and never simply imposed from the outside, since it can only be effective to the extent that it is able to translate or "transduce" itself into one or another material. That is to say, form is energetic: it works by a series of transformations that transmit energy, and thereby "inform" matter, affecting it or modulating it in a process of exchange and communication. (The medium is the message, as Marshall McLuhan puts it; contrary to the hylomorphic assumptions of Shannon's theory of communication, no message, or formal structure, can be indifferent to the medium by and through which it is transmitted).

In the “Transcendental Aesthetic,” in contrast to the “Transcendental Logic,” Kant does not altogether adhere to hylomorphism. He does indeed say that space and time are the “pure forms” of perception, and that “sensation as such is its matter” (1996, 95). But his discussion also bears the traces of a different logic, one more open to intermediaries. Because time and space are not categories or concepts, they do not relate to their objects in the way that the forms of logical intelligibility (“causation, substance, quality, quantity”) do. They are not organizing principles actively imprinted upon an otherwise shapeless and disorganized matter. In Simondon’s terminology, space and time are the media of a flexible, always-varying *modulation*, while the Categories are the principles of a rigid and always-identical *molding* (2005, 47).⁹ Space and time have a certain flexibility, because they are modes of receptivity rather than spontaneity. Kant says that sensibility or receptivity “remains as different as day and night from cognition of the object in itself”; rather than being cognitive, sensibility has to do with “the appearance of something, and *the way we are affected by that something*” (1996, 96; italics added).

And that is the crucial point. Even though the “thing in itself” is unknowable, or uncognizable, nevertheless *it affects us*, in a particular way. And by conveying and expressing “the way we are affected,” space and time establish immanent, non-cognitive connections among objects, between the object and the subject, and between the subject and itself. These affective connections are intrinsic to the very course of any experience in space and time. Whitehead laments the fact that Kant “conceives his transcendental aesthetic to be the mere description of a subjective process” (1929/1978, 113), and reserves for the “Transcendental Logic” the more basic task of giving an account of the necessary conditions of all experience. But once we take the “Transcendental Aesthetic” in the more radical manner that Whitehead suggests, there is no problem of formlessness, or of disconnected, atomistic impressions; and therefore there is no need to impose the Categories of understanding from above, in order to give these impressions form, or to yoke them together. As Whitehead puts it, in such a *process of feeling* causality does not need to be established extrinsically, since “the datum includes its own interconnections” already (113).

Understood in this way, Kant’s “Transcendental Aesthetic” provides the basis for

⁹As Deleuze (1997) puts it, traditional philosophy posits “a concept-object relation in which the concept is an active form, and the object a merely potential matter. It is a mold, a process of molding.” But with Kant, thanks to his new treatment of time and space, everything changes: “The concept-object relation subsists in Kant, but it is doubled by the I-Self relation, which constitutes a modulation and no longer a mold” (30).

one of Whitehead's most important notions, that of "subjective form." In Whitehead's account, every prehension "consists of three factors: (a) the 'subject' which is prehending, namely, the actual entity in which that prehension is a concrete element; (b) the 'datum' which is prehended; (c) the 'subjective form' which is *how* that subject prehends that datum" (23; also cf. 1933/1967, 176). The first two of these factors may stand in for the "subject" and "object" of traditional epistemology, though the parallels are not exact.¹⁰ But the third factor, the *how*, is the really important one. Any given "datum," Whitehead says, is objective and entirely determinate. In itself, a datum is always the same. But this self-identity does not entirely determine, although it somewhat limits, the particular *way* in which a given entity receives (prehends or perceives) that datum. There is always some margin of indeterminacy, some room for "decision" (43), in "*how* that subject feels that objective datum" (221).

This margin is what allows for *novelty*: "the essential novelty of a feeling attaches to its subjective form. The initial data, and even the nexus which is the objective datum, may have served other feelings with other subjects. But the subjective form is the immediate novelty; it is *how that* subject is feeling that objective datum" (232). Every subjective form is different from every other; no subject feels a given datum in precisely the same manner as any other subject has done.¹¹ This means, among other things, that novelty is a function of *manner*, rather than of essence. The important question for Whitehead is not *what* something is, but *how* it is – or, more precisely, how it affects, and how it is affected by, other things. If Being is a substantive for the classical metaphysicians, and a verb for Heidegger, then for

¹⁰The differences include the fact that prehension is not necessarily conscious, and indeed most of the time is entirely unconscious; as well as the fact that the "subject" does not pre-exist its encounter with the "datum" or "object," but is only produced in the course of that encounter. Whitehead regards the "clear and distinct" perception privileged in 17th and 18th century epistemology as only a very special case of prehension, and not a typical one; generalizing from this case, as philosophers from Descartes through Kant tend to do, leads precisely to the sensationalist principle and the overvaluation of "the higher of the human modes of functioning."

¹¹This is even the case when the "subjects" in question are successive instances of the same person or self. I do not feel a given datum in the same way that I did a minute ago, if only because the memory of my experience of a minute ago has added itself to what I am feeling now. This is what Whitehead means when he states that "no two actual entities originate from an identical universe; though the difference between the two universes only consists in some actual entities, included in one and not in the other" (22-23). The difference between my universe of "between a tenth of a second and half a second ago" (1933/1967, 181) and my universe right now, in the present instant, is that my experience of the former is an "actual entity" that has been "objectified," and added to the "data" prehended by the latter.

Whitehead it is adverbial. “*How* an actual entity *becomes* constitutes *what* that actual entity *is*. . . Its ‘being’ is constituted by its ‘becoming’” (23).

This emphasis upon “subjective form” as a manner of reception is what links Whitehead to Kant’s “Transcendental Aesthetic.” For all that Kant privileges and foregrounds cognition, he is drawn into a movement that precedes it, and that is irreducible to it. Time and space, the inner and outer forms of intuition, are modes of feeling *before* they are conditions for understanding. This follows from Kant’s very definition of sensibility as “the capacity (a receptivity) to acquire presentations as a result of the way we are affected by objects”; Kant goes on to say that this is how “objects are *given* to us” (1996, 72). Whitehead retains a number of things from this formulation. First, there is Kant’s insistence upon the sheer *givenness* of the external world, and upon the receptivity with which we encounter it. This parallels Whitehead’s (1929/1978) own insistence upon “stubborn fact which cannot be evaded” (43), and “which at once limits and provides opportunity for the actual occasion” (129). Then, there is the fact that Kant phrases his account in terms of actual “objects,” rather than in terms of *sensa* (Hume’s bare sense impressions). This accords with Whitehead’s appeal to “actual entities,” or *res verae*, as the ultimate constituents of reality, and his insistence that the “ideas” of seventeenth- and eighteenth-century empiricism always already (despite the empiricists’ mentalist presuppositions) refer to “exterior things” (55), or are “‘determined’ to particular existents” (138). Finally, there is Kant’s implicit acknowledgement that these objects *affect* us, prior to any knowledge of them on our part, or to any formal process of cause and effect (since Kant only accounts for, or accepts, causality at a latter stage, in his “deduction” of the Categories of understanding). This means that Kant, like Hume before him, implicitly (and in contradiction to his own premises) accepts the existence of relations of “inheritance” and influence, connecting entities one to another according to what Whitehead calls the mode of “causal efficacy” (168-183). In all these ways, Kant opens the door to Whitehead’s “theory of feelings” (219-235).

Through his analysis of “subjective form,” Whitehead privileges feeling over understanding, and offers an account of experience that is affective rather than cognitive. Even if we restrict our focus, as Kant did, to “*sensa*” (qualia, the basic atoms of sense-perception in the mode of “presentational immediacy”), the “main characteristic” of these *sensa* “is their enormous emotional significance” (1933/1967, 215). Every experience of perception involves an “affective tone” (176), and this tone precedes, and both determines and exceeds, cognition. We do not first per-

ceive what is before us, and then respond emotionally to these perceptions. Whitehead says that the order is rather the reverse. For “the direct information to be derived from sense-perception wholly concerns the functionings of the animal body” (215). Perception is first a matter of being-affected bodily. Contact with the outside world strengthens or weakens the body, stimulates it or inhibits it, furthers or impairs its various functions. Every perception or prehension thus provokes the body into “adversion or aversion” – and this is already the “subjective form” of the prehension (1929/1978, 184). It is only later that (in “high-grade” organisms such as ourselves, at least) “the qualitative characters of affective tones inherent in the bodily functionings are transmuted into the characters of regions” in space (1933/1967, 215), so that *sensa* can be taken to qualify (or to give us information about) objects of knowledge in the external world. We respond to things in the first place by feeling them; it is only afterwards that we identify, and cognize, what it is we feel.

Whitehead’s account of perception as feeling is a refinement, and an extension, of William James’ (1983) theory of the emotions. James claims “that we feel sorry because we cry, angry because we strike, afraid because we tremble, and not that we cry, strike, or tremble, because we are sorry, angry, or fearful, as the case may be” (1065-1066). Emotions do not cause bodily states; rather, the bodily states come first, and the emotions arise out of them. Strictly speaking, this is more an argument about expression than about causality. Our “perception” of an “exciting fact” takes the form of “bodily changes”; and “our feeling of the same changes as they occur IS the emotion” (1065). James’ real point is not to reverse the order of causality, so that (contrary to what we usually think) the bodily state would be the cause and the mental state the effect. Rather, he asserts the *identity* of these conditions, in a radical monism of affect: “whatever moods, affections, and passions I have are in very truth constituted by, and made up of, those bodily changes which we ordinarily call their expression or consequence” (1068). There is no separating body from mind, or the (bodily) expression from what it (mentally) expresses. Perception is already, immediately,¹² action in the form of “bodily changes”; and the way that I receive a perception, or apprehend its “*sensa*,” is the way that my body changes, or has changed. Perception or excitation, action or bodily changes, and emotion or response, are all one and the same event. It is only in subsequent reflection that we can separate them from one another (just as, for Whitehead, it is

¹²“Immediately” here means in the same undecomposable present moment. Of course, James insists that such a “*present* moment of time,” or what he prefers to call the “specious present,” is never literally instantaneous, but always possesses a certain thickness of *duration* (573-574).

only in subsequent reflection, and by a process of abstraction, that we can separate the “subjective form” of a prehension from the datum being prehended, and both of these from the “actual entity” of which the prehension is a “concrete element”).

James describes emotion as a particular sort of experience. Whitehead radicalizes this argument, and expands its scope, by describing *all* experience as emotional. This includes bare sense-perception; it also includes modes of “experience” that are not conscious, and not necessarily human. Indeed, Whitehead’s philosophy “attributes ‘feeling’ throughout the actual world” (1929/1978, 177). For Whitehead, “feelings” are identical with “positive prehensions” in general, which are all the ways in which entities interact with one another, or affect one another (220).¹³ To feel something means to be affected by that something. And the way that the feeling entity is affected, or changed, is the very content of what it feels. Everything that happens in the universe is thus in some sense an episode of feeling: even the “actual occasions in so-called ‘empty space’ ” discovered by modern physics (177). Of course, quantum fluctuations in the void do not involve anything like consciousness or sense-perception. But when we examine these fluctuations, “the influx of feeling with vague qualitative and ‘vector’ definition is what we find” (177). Overall, there is “a hierarchy of categories of feeling” (166), from the “wave-lengths and vibrations” of subatomic physics (163) to the finest subtleties of human subjective experience. But in every case, phenomena are felt, and grasped as modes of feeling, before they can be cognized and categorized. In this way, Whitehead posits feeling as a basic condition of experience, much as Kant establishes space and time as transcendental conditions of sensibility.

This brings us back to the “Transcendental Aesthetic.” If time and space are the forms, respectively, of inner and outer intuition, then feeling is their common generative matrix. It is *by* the receptive act of feeling that I locate things in space and in time. In other words, feeling is the process by which all entities get spatialized and temporalized. Whitehead thus agrees with Kant (1996) that “space represents no property whatever of any things in themselves” (81), and that “time

¹³To be more precise, Whitehead distinguishes between “physical prehensions,” in which an actual entity feels, or interacts with, other actual entities, and “conceptual prehensions,” in which an actual entity feels, or interacts with, “eternal objects” (potentialities, including qualities and concepts). And many prehensions are “hybrids” of both of these kinds. But in every case, a prehension is a process whereby an actual entity *feels* something.

There are also “negative prehensions,” in which an actual entity *excludes* other entities (or eternal objects) from being felt, or from any such interaction. But Whitehead says that these “can be treated in their subordination to the positive prehensions” (220).

is not something that is self-subsistent or that attaches to things as an objective determination” (87). Space and time are basic forms of affectivity; they cannot be pre-assumed, but need to be constructed in the process of experience. Whitehead is in accord, then, with Kant’s contention that space “is the subjective condition of sensibility under which alone outer intuition is possible for us” (81), and that “time is nothing but the subjective condition under which alone any intuition can take place in us” (88). Whitehead’s one crucial difference from Kant on this point is that, for Whitehead, such “subjective conditions” apply for all entities, and not just for human (rational) minds. Time and space are not epistemological necessities that we alone impose upon the world, but “subjective conditions” that all beings in the world effectively produce, in the course of their experiences.

In line with this assertion of the constructed, conditional nature of time and space, Whitehead denounces what he calls “the fallacy of simple location” (1929/1978, 137; citing 1925/1967, 49ff.). This fallacy consists in believing that a “bit of matter” can be located absolutely “in a definite finite region of space, and throughout a definite finite duration of time, apart from any essential reference of that bit of matter to other regions of space and to other durations of time” (1925/1967, 58). But so to posit “the individual independence of successive temporal occasions” (1929/1978, 137), and the correlative notion of “absolute places” in space (71), is to ignore the way that feeling is relational, and “essentially a transition” (221). Feeling always points from place to place; and feeling inherits from the past, and projects towards the future. Through the process of feeling, different points in space “are united in the solidarity of one common world” (72). And every process of feeling produces time: both as the “perpetual perishing” of the entity that feels, and as “the origination of the present in conformity with the ‘power’ of the past” (210). This “power” of the past, which marks time as transition, and which forges relations from one point in space to another, is the force of *repetition*. Every “present” moment forcibly “inherits,” and thereby repeats, what came before. “The notion of ‘simple location’ ” is a fallacy, because it “is inconsistent with any admission of ‘repetition,’ ” or of a time that intrinsically refers to another time (137). To establish a particular spacetime location is always, first of all, to affirm repetition, and thereby establish a difference, by referring elsewhere and elsewhere, to other stretches of space and other periods of time.¹⁴

¹⁴For this account of time as “transition,” I draw heavily upon the discussion by Keith Robinson (2006, 74-77).

As for the idea that repetition produces newness, or difference, I am of course drawing it from Gilles Deleuze; repetition as difference is a central motif of his thought. However, Deleuze’s

Actual entities, then, are not primordially located in space and ordered by time. Rather, spatial location and temporal sequence are themselves generated through the becoming of these actual entities. That is to say, an entity composes or creates itself by feeling the other entities that have influenced and informed it; and it feels them as being spatially and temporally distinct from itself. This self-distinguishing action of each new entity, and the consequent differentiation of time and space, is a necessary concomitant of the very process of feeling. Every “pulse of emotion” (163) is both a fresh creation of spacetime, and an immediate perishing, or “objectification.” The “emotional continuity of past with present. . . is a basic element from which springs the self-creation of each temporal occasion. . . How the past perishes is how the future becomes” (1933/1967, 238). It is only when an actual entity perishes – when it is no longer actively engaged in the process of feeling – that it is fully “‘spatialized,’ to use Bergson’s term” (1929/1978, 220; cf. 209). It is thereby fully temporalized as well, since “the atomization of the extensive continuum is also its temporalization” (72).¹⁵ Only when a process of feeling has completed itself and perished, can it be circumscribed as a datum to be felt, “a definite fact with a date” (230).¹⁶

sense of repetition as the affirmation of difference is developed mostly through his analysis of Nietzsche’s Eternal Return, and seems to owe very little to Whitehead.

¹⁵This latter development is something that Bergson would not accept, since he insists on time as the form of inner intuition, and on the absolute priority of such time over mere space. Whitehead’s parallel between temporalization and spatialization follows from his endeavor to come to terms, as Bergson did not, with Einsteinian relativity, and the consequent conceptual unity of spacetime. Though Whitehead says that his own idea of feeling “has. . . some kinship” with Bergson’s “use of the term ‘intuition’ ” (41), he also objects that Bergson’s notion of intuition is incomplete, since it “seems to abstract from the subjective form of emotion and purpose” (33).

¹⁶This is also the point at which, in Massumi’s (2002) terms, impersonal “affect” has been captured and contained as a personal, psychological “emotion.”

The whole question of Whitehead’s theory of space and time requires a far lengthier, and more careful, exposition than I am able to give it here. In the present context, I only wish to emphasize how Whitehead, like Bergson, is the heir of what Deleuze (1984) calls Kant’s revolutionary “reversal of the movement-time relationship,” so that, instead of time being “subordinate to movement. . . it is now movement which is subordinate to time” (vii). As a result, “time can no longer be defined by succession,” and “space cannot be defined by coexistence” (viii). To the contrary, succession and coexistence can themselves only be understood as effects of the more fundamental, creative processes of temporalization and spatialization. Under Kant’s new conceptualization, “time moves into the subject” as a force of affecting and being-affected (ix). This is how the “Transcendental Aesthetic” provides a basis for Whitehead’s doctrine of feeling. When Whitehead attributes temporalization and spatialization to a prior movement of “feeling,” he is expanding upon, and radicalizing, Kant’s own claim that sensible intuition is non-cognitive, or at least pre-cognitive.

Under these conditions, every feeling is a “‘vector feeling,’ that is to say, feeling from a beyond which is determinate and pointing to a beyond which is to be determined” (163). In the material world, as it is described by modern (relativistic and quantum) physics, “all fundamental physical quantities are vector and not scalar” (177); “scalar quantities are constructs derivative from vector quantities” (212). The precedence of vectors over scalars, or of relational terms over atomistic ones, means that no point of spacetime can be isolated from the overall “physical electromagnetic field” (98), with its interplay of forces and its quantum interactions. This immanent connectedness, rather than any imposition from above of the Categories of the understanding, is the real basis for physical causality. In Whitehead’s theory of feelings, correspondingly, “the crude aboriginal character of direct perception is inheritance. What is inherited is feeling-tone with evidence of its origin: in other words, vector feeling-tone” (119). Whitehead uses the language of vectors to speak about feelings, because he makes no essential distinction between physical causality (the way that one entity transmits energy or movement to another entity) on the one hand, and perception (the way that one entity feels, and responds to, another entity) on the other. To say that entity A is the cause of entity B as effect, is also to say that entity B prehends entity A. Even mechanistic (and quantum-mechanistic) interactions are feelings, according to Whitehead; and even the most “simple physical feeling” is at once both “an act of perception” and “an act of causation” (236). The “emotional feeling” with which we receive *sensa* like color is not fundamentally different in kind from the manner in which subatomic particles relate to one another; it is only much broader in scope (163). Feeling, as such, is the primordial form of all relation and all communication.

To summarize, feeling can be conceived as vector transmission, as reference, and as repetition. These three determinations are closely intertwined. Every feeling involves a reference to another feeling. But reference moves along the line of the vector. Feeling as reference is a transmission through space, a direction of movement as well as a magnitude. This transmission is also a process in time. In the vector, time has a direction: the arrow of time is always moving from the already-determined to the not-yet-determined and to-be-determined. The feeling entity is “conditioned” by, or is an “effect” of, all the other entities that it feels (236); and this entity, in turn, becomes a condition, or a cause, for whatever subsequent entities feel it in their own ways. Every entity thus “conforms to the data” that it receives from the past, “in that it feels the data” (85). But in the act of feeling its data, every entity also selects among, shapes, and alters these data, until it reaches a final determination. In so doing, it offers itself to be felt by other entities in its

own turn, so that it is “referent beyond itself” (72). The “objectification” of the entity, once it has been completely determined, allows for its repetition. And this repetition is the key to the future as well as to the past; for every new process of becoming “involves *repetition* transformed into *novel immediacy*” (137).

An act of feeling is an encounter – a contingent event, an opening to the outside – rather than an intrinsic, predetermined relationship. And feeling changes whatever it encounters, even in the act of “conforming” to it. That is why feeling is irreducible to cognition. It isn’t anything that we already know. The problem with cognitive theories of mind, and with hermeneutical modes of interpretation, is that they reduce the unknown to the already-known, the already-determined. These theories assume that my not-knowing is only a contingency for myself, that ignorance is a particular state that I am in; while they imagine that the object I am seeking to know is in itself already perfectly determinate, if only I *could* come to know it. They thereby elide “experience as a constructive functioning,” and restrict their attention to that which has already been experienced and constructed. They only get half the picture; they trace the vector backwards into the past, but not forwards into the future. They grasp the actual, but miss the potential, the yet-to-be. They appreciate “conformity of feeling,” but ignore deviation and novelty. They analyze whatever has already been felt, selected, and determined; but they miss the very process of selection and determination, which is feeling itself.

All this might sound like the sheerest romantic blather, the sort of naive protest of Life against Intellect, and Feeling against Thought, that decades of modernist critical theory, and postmodernist deconstruction, have taught us to distrust. But I want to insist that it is, rather, a rigorous expression of Whitehead’s “critique of pure feeling,” and of his conversion of Kant from transcendental idealism to transcendental empiricism. The process of this conversion is twofold. First, Whitehead recasts Kant’s “Transcendental Aesthetic,” so that the intuition of space and time is “not productive of the ordered world, but derivative from it” (1929/1978, 72). And second, Whitehead extends the scope of the “Transcendental Aesthetic,” so that it also includes all those operations – like relations of causality – that Kant assigned to the “Transcendental Logic.” This means that, far from exalting anything like a sentimental cult of spontaneous feeling, or a Romantic theory of the creative imagination, Whitehead eliminates Kant’s notion of spontaneity altogether. For Kant, “our *spontaneity* of cognition,” or understanding, “is our ability to *think* the object of sensible intuition” (1996, 106-107), which is something entirely separate from the intuition itself. Whitehead rejects this dualism; he refers

all experience, thought included, to a process of being-affected, a process located *within* what Kant calls the receptivity of sensible intuition.¹⁷

Action, then, cannot be opposed to passive reception, in the way that traditional metaphysics opposes form to matter, or mind to body, or essence to accident. It is rather that activity, no less than passivity, is a dimension of receptivity itself. Every experience, every feeling, is at one and the same time an “inheritance” from the past and a fresh creation. And both of these dimensions are contained within an open affectivity. “The separation of the emotional experience from the presentational intuition,” a separation that Kant presupposes, and that is necessary for cognition, is in fact quite rare, since it is only “a high abstraction of thought” (1929/1978, 162-163). More generally, there is a continuum from primordial, entirely “conformal feelings,” to later, or higher, stages of “supplementary feeling.” In conformal feeling, “the *how* of feeling reproduces what is felt,” so that it “merely transforms the objective content into subjective feelings.” Supplemental feelings, to the contrary, actively involve “the subjective appropriation of the objective data” (164-165). That is to say, supplemental feelings may alter the data, or wish to alter the data, or deny the data, or compare and contrast the given data with other (remembered or imagined) data, or self-reflexively respond to the first, conformal responses to the data – and so on, almost *ad infinitum*.¹⁸ But all of these are still forms of receptivity, still ways of feeling the data. There is no point at which we pass from receptivity to spontaneity, from relational response to pure originality, or from emotion to “clear and distinct” cognition. Even the most complex and reflexive modes of thought are still instances of supplemental feeling. As such, they continue to “involve essential compatibility” with the initial conformal feelings from which they arose, so that “the process exhibits an inevitable continuity of functioning” (165).

¹⁷In this sense, “the receptivity of sensible intuition” includes, not just physical prehensions, or prehensions of actual entities (sensible data), but also “conceptual prehensions,” or prehensions of “eternal objects” (concepts and mere potentialities). See 1929/1978, 23.

¹⁸Negation (denying the data) has its place within the many forms of supplemental feeling. Whitehead even gives negation an especially important place, arguing that “the general case of conscious perception is the negative perception,” that more generally “consciousness is the feeling of negation,” and that it is through negation that consciousness “finally rises to the peak of free imagination” (161). In this way, Whitehead recognizes and acknowledges the role of Hegelian negativity. Nonetheless, negation remains a kind of feeling, and a rarefied and uncommon one at that. For Whitehead, the Hegelian tradition indulges in exaggeration and “overstatement,” the vice of all philosophy (7-8), when it puts negation at the heart of being, and treats the logic of negation as a cognitive principle, rather than attending to its emotional roots and emotional force.

If feeling, rather than cognition, is the basis of all experience, and if “apart from the experiences of subjects there is nothing, nothing, nothing, bare nothingness” (167), then the only way of organizing and ordering this experience must be an immanent one, from within subjective feeling itself. We know that, in fact, experience is not as chaotic as it would have to be if Hume’s skeptical speculations were correct. Our experience always displays an immanent order; if anything, in fact, it has *too much* order. No Rimbaudian “dérèglement de tous les sens” is ever enough to disrupt it. Most traditional metaphysics is concerned with grounding the order of experience in “clear and distinct” cognition: as if, were it not for philosophy’s strong guiding hand, everything would immediately break down. But Whitehead knows that such fears are baseless. Protecting rational order is not the problem. The real difficulty is how to *account for* the order, or the “essential compatibility,” that continues to organize and regulate experience, no matter what we do to shake it up, and even in the absence of cognition. In other words, Whitehead is concerned with what today we would call “emergent order” or “self-organization.” In rejecting Kant’s “Transcendental Logic” as the source of this order, Whitehead is left only with his revised version of the “Transcendental Aesthetic.” Nothing else can provide an immanent principle, or criterion, for order within the boundaries of mere feeling.

This means that Whitehead’s immanent criterion for order can only be an aesthetic one. Truth and understanding are not adequate to the task: for feeling is more basic than cognition, and “it is more important that a proposition be interesting than that it be true” (1929/1978, 259; 1933/1967, 244). Indeed, “in itself, and apart from other factors, there seems to be no special importance about the truth-relation” (1933/1967, 265). These “other factors” that make truth “interesting” are, precisely, non-cognitive feelings. Judgments of truth – or, as Whitehead prefers to call them, “propositions” or “theories” – are only important when they are felt, and to the extent that they are felt. In asserting this, Whitehead is very much a Jamesian pragmatist. The pragmatic test for truth is the interest that it sustains; “the primary function of theories is as a lure for feeling, thereby providing immediacy of enjoyment and purpose” (1929/1978, 184). Truth is finally a matter, not of empirical verification, but of “enjoyment and purpose,” or (to use Whitehead’s more frequent term) “satisfaction.” That is why “Beauty is a wider, and more fundamental, notion than Truth” (1933/1967, 265).¹⁹

¹⁹It is important to point out, once again, that this means “not a relativity of truth, but, on the contrary, a truth of the relative.” James’ and Whitehead’s pragmatism is not a slipshod relativism, but rather a claim about the *situatedness* of truth. A truth that is not “important,” or not strongly

In linking feeling to beauty, rather than subordinating it to truth, Whitehead unites the two senses of the word “aesthetic” that we find in Kant (and in the philosophical tradition more generally). On the one hand, the “Transcendental Aesthetic” has to do with sensation and the forms of sensibility; on the other hand, the “Critique of Aesthetic Judgment” in the *Third Critique* has to do with experiences of the beautiful and the sublime. Though Kant himself doesn’t comment upon the disparity between these two senses, other thinkers have found it problematic. As Deleuze (1990) puts it, “aesthetics suffers from a wrenching duality. On one hand, it designates the theory of sensibility as the form of possible experience; on the other hand, it designates the theory of art as the reflection of real experience. For these two meanings to be tied together, the conditions of experience in general must become conditions of real experience” (260). For Deleuze, such a transformation is accomplished by certain modernist art practices; in Joyce’s *Finnegans Wake* and Gombrowicz’s *Cosmos*, among other works, “the conditions of real experience and the structures of the work of art are reunited” (261).²⁰

But Whitehead unites the two senses of aesthetics without privileging modernist aesthetic experimentation in particular. This is because, for Whitehead as for Kant, the question of beauty pertains not just to the creation and reception of works of art, but to sensible experience more generally. The connection, unremarked by Kant, between the “Transcendental Aesthetic” and the “Critique of Aesthetic Judgment” is that acts of sensible intuition and judgments of beauty alike involve feelings that are receptive and not spontaneous, and for which there

felt, does not thereby cease to be true; and a false proposition doesn’t become true, merely by virtue of being invested with intense feeling or great aesthetic appeal. An unimportant truth is just that: unimportant. But it may *become* important, if it is invested by feeling. And when a false proposition operates effectively as a “lure,” so that it is invested with great feeling, one result may be the arousal of an “appetition” that works towards changing the world in order to *make* the proposition true. This is the very basis of change and Creative Advance: the “realization of what is not and may be” (1929/1978, 32).

²⁰Elsewhere, Deleuze (1994) states the same point slightly differently. Aesthetics is “divided into two irreducible domains: that of the theory of the sensible which captures only the real’s conformity with possible experience; and that of the theory of the beautiful, which deals with the reality of the real insofar as it is thought. Everything changes once we determine the conditions of real experience, which are not larger than the conditioned and which differ in kind from the categories: the two senses of the aesthetic become one, to the point where the being of the sensible reveals itself in the work of art, while at the same time the work of art appears as experimentation” (68). Here, the emphasis is less on specific modernist art practices than on the way in which philosophical constructivism converts Kant’s transcendental conditions of possibility into generative conditions of actualization.

can be no adequate concepts. In both cases, there is a certain act of creative construction on the part of the subject; yet this construction is responsive to the given data, and cannot be described as arbitrarily imposed, or as merely subjective. Neither the attribution of time and space to phenomena, nor the attribution of beauty to phenomenal objects, can be justified on cognitive grounds. Yet both these attributions make universalizing claims that have to be taken seriously.

Whitehead emphasizes these continuities between the two senses of aesthetics. He notes that the creation of “subjective form,” as an element in any act of sensible intuition, is already a proto-artistic process, involving as it does the selection, patterning, and intensification of sensory data. There is always already a “definite aesthetic attitude imposed by sense-perception” itself (1933/1967, 216). Even the most utilitarian, result- and action-oriented modes of perception nonetheless remain largely receptive, and thereby involve a certain “affective tone,” and a certain degree of aesthetic contemplation – and, Whitehead adds, “thus art is possible” (216). In the process of feeling, “any part of experience can be beautiful,” and “any system of things which in any wide sense is beautiful is to that extent justified in its existence” (265). Though it falls to Whitehead to make these immanent connections explicit, they are already there, implicitly, in Kant’s own accounts of sensible reception and aesthetic judgment. It is only Kant’s privileging of cognition over affect that leads to the “wrenching duality” deplored by Deleuze.

If “the basis of experience is emotional,” then the culmination of experience – what Whitehead likes to call its “satisfaction”²¹ – can only be aesthetic. This is the reason for Whitehead’s outrageously hyperbolic claim that “the teleology of the Universe is directed to the production of Beauty” (1933/1967, 265). Whitehead defines Beauty as “the mutual adaptation of the several factors in an occasion of experience”; it is the “Harmony” of “patterned contrasts” in the subjective form of any such occasion. The purpose of such “patterned contrasts” is to increase, as much as possible, the experience’s “intensity of feeling” (252). Such a building-up of intensity through contrast is the basic principle of Whitehead’s aesthetics,

²¹ Whitehead uses “satisfaction” as a technical term. He defines it as the “final unity” of any actual occasion or experience, “the culmination of the concrescence into a completely determinate matter of fact” (1929/1978, 212). “Satisfaction” evidently does not mean that an experience has turned out happily, or favorably, or unfrustratingly; but just that the process of experiencing has terminated, and now only subsists as a “stubborn fact,” or a “datum,” for other experiences to prehend in their own turns. In the present context, the crucial point is that the same movement that transforms an affective encounter into an objectively cognizable state of affairs also, and simultaneously, offers up that state of affairs as an object for aesthetic contemplation.

applying to all entities in the universe. At the low end of the scale, even the most rudimentary “pulses of emotion” (like the vibrations of subatomic particles) exhibit a “primitive provision of width for contrast” (1929/1978, 163). And at the highest end, even God is basically an aesthete. “God is indifferent alike to preservation and to novelty,” Whitehead says. “God’s purpose in the creative advance is the evocation of intensities” (105). Whitehead’s overall principle of “creative advance,” his “Category of the Ultimate” underlying all being (21), has nothing to do with Victorian notions of moral and political improvement, nor with the capitalist ideal of endless accumulation. Creative advance is rather an intensive, qualitative, and aesthetic drive for “depth of satisfaction” (93, 110). Emotions are intensified, and experiences made richer, when incompatibilities, instead of being excluded (negatively prehended), are transformed into contrasts that can be positively integrated within a greater “complexity of order” (100). But this process is not a tranquil or banally positive one, and Whitehead certainly does not regard “order” as an intrinsic good. The “patterned contrasts” must not be too tastefully arranged. Creative advance is stifled by any sort of static perfection. It demands, rather, the impetus for renewal that comes from “the emotional experience of aesthetic destruction” (1933/1967, 256-257). Whitehead always reminds us that “it is the business of the future to be dangerous” (1925/1967, 207); his aesthetics of feeling is both an expression of this danger, and the best means we have for coming to grips with it.

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