

Passive Knowledge: How to Make Sense of Kant's A Priori

—Or How Not to Be “Too Busily Subsuming”

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Subjectivists, taking the “collapse” of the observation-interpretation contrast much too seriously, are led to imagine that even *perceptual* knowledge is active. And therefore subject dependent. Turning the tables on this popular trend, I argue that *even conceptual knowledge is passive*. Kant's epistemology is conceptual. But if also active, then incoherent. If synthetic a priori truths are to follow *upon* our mental activity, they were neither true nor, far less, a priori *before* that activity. “A priori” and “active” are contradictory attributes of knowledge. As, indeed, are “a priori” and “subject-dependent” to begin with. Nothing a priori can be dependent on anything except itself, and least of all on the human subject. Kant does consider the active aspect of thought. The difference is that for him the more active it becomes, the less it is to be trusted. For we are no longer in the province of the Understanding, and its necessary truths, but in the realm of Pure Reason and its dialectical antinomies. Cognition activists who take a liking to Kant have simply mistaken Reason for the Understanding. And Reason is to Kant “the seat of all transcendental illusion”.

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The Dark Aspects of the Active Side

Trivially, the task of epistemology is to study the validity of knowledge. But of recent epistemologists appear to have their priorities confused. The discipline is now being extensively employed to underpin *ideological* aims in preference to its traditional pursuits, objectivity and truth. This is accomplished by a strategic emphasis on the *active* aspects of cognition and a correlative diminution of good old passive receptivity, which seemed to warrant, if no more, at least a certain degree of emancipation from the influences of human agency. What now seems to matter are no longer correct results but, rather, the stressing of *our* role in the process of cognition, where the dry, impersonal investigations of the past have given place to a rising trend of epistemological heroics.

It is below us, we reason, to view ourselves as cognitive automata to which reality dictates perceptions and concepts unprotestingly (?). Concessions to passive knowledge are almost universally considered by epistemologists as a kind of treason against the human race, a species of *doers*, they tell us, not of observers. It is a matter of human pride for some, that our knowledge bear *our* stamp rather than that of the world as such. There *is* no world as such to begin with, the more avant garde of the lot assure us. All there are are “interpretations”; active ones, which yield in to the inspection of the sociologist rather than to the traditional epistemologist. [Barnes, 1974: p. 12]. For what was certainly a loss to objectivity, was definitely a gain to society, especially when it comes to the *egalitarian* advantages, availed in abundance by humanitarian relativism.

Though the true motivation behind it all was apparent to many, it was Alan Sokal's unconventional, but telling, intervention by means of his pseudo-paper in *Social Text* [Longino, 1997: p. 119], which decisively turned the tables to this new epistemological establishment, making things far more uncomfortable for it than any philosophical argument ever could. The crowded industry, which Sokal's prank has since scattered in

search of alternative methods for continuing the crusade, shared a ruling tendency in common.

Knowledge is something that *we do*. Not something which *happens* to us. This is one of the main reasons, though not the sole there is, why *science* rather than knowledge became the intensive focus of several of its representatives, e.g. Th. Kuhn, P. K. Feyerabend and St. Toulmin [Katz, 1978; p. 329]. Science, in this connection, is the name of an *activity*. Knowledge, the name of a *state*. Sociology of Knowledge, the new discipline necessary to account for *Social Text* Epistemology, is a practice applicable to the former concept. Not to the latter.

There can be a sociology of what *we do* in the acquisition of knowledge but not a sociology of what *happens* to us in its acquisition, considering that the former procedure is something dependent on our will, the latter something independent of our will or anybody else's. Sociology of Knowledge, the publicly acceptable form of cover up for *Social Text* Philosophy, is mainly interested in “knowledge”, in whose acquisition we clearly have a say, right where it looked like we never did. Since to a state of ours, resulting in us through no act of our own volition but through random external influence, we have little say, the sociology of the latter is of little profit. Unless, that is, we get radical enough and bold enough to postulate the social processing of even the crudest of our perceptions, thus doing credit to the afore said novelty of a discipline.

One such case of processing is Kuhn's allusion to the “duck-rabbit” phenomenon of perception. The “duck-rabbit”, a sketch vague by design, purposively intended to stand on the borders separating ducks from rabbits, manages, according to Kuhn, to “show that two men with the same retinal impressions can see different things”. [Kuhn, 1970: p. 127] That is to say, some see the duck, some the rabbit, depending on... what else? Culture. Of course, at a metalevel, Kuhn himself sees only what there *is*; namely, a duck-rabbit. *His* retinal impressions are strictly object-dependent and passive. Otherwise, the story he wants to tell us could not even get started. But Kuhn fails to

notice this side effect of his argument, one failure of many. To him this phenomenon marks the collapse of the so called “observation-interpretation statement” dichotomy. [Kuhn, 1970: p. 111 ff]. Observation is concept-directed, and therefore active.

Like most of Kuhn’s arguments the duck-rabbit argument confirms the opposite thesis a lot more than it confirms his own. First of all, the *narrators* of the incident, namely, detached observers like himself, at the metalevel all see the same thing: A duck-rabbit. And not two things. And without this information Kuhn’s case cannot even be stated. For for stating it, independent narrators need to separate between what the two subjects see, i.e. two different things, and what *they* see, i.e. *one* thing. Hence, when all is said and done, one thing *can* be seen.

Secondly, the two subjects of the experiment see different things because, quite simply, there is too little *to* see in the first place. The design is merely a *borderline case* between a normal duck and a normal rabbit, hence satisfying in its sensory deprivation conflicting criteria. [Antonopoulos, 1993, p. 186.] The drawing is partly a duck, partly a rabbit by (tricky) design. Hence, its sensory paucity, on the one hand, and its intentionally antinomic constitution, on the other, most naturally result to antithetic classifications by the two subjects, even if Kuhn is quick to identify this as antithetic “seeings”, another severe blunder on his part. We only have access to what the two subjects *report* they see, namely, their *classifications* of the drawing, not how they “see” it. And though the former are certainly active, the latter needn’t be. And so needn’t his case.

Need we labour the point? Need we doubt that if Kuhn’s experimental subjects were shown the *photographs* of the two animals, instead of the borderline drawing now shown, they would no longer see different things at all? They would both see ducks in the photographs of ducks and rabbits in the photographs of rabbits. It’s as simple as this. And then all the magic of active seeing would be lost. Now that the perceptual freedom formerly granted by the ghostly, artificial pseudo-object has been removed by the *constraints of reality*, the hands of the active mind are tied. And passive unanimity is restored.

The independent specifications of the duck-rabbit effect only go to show that (a) = perceptual element, and (b) = subjective improvisation, are simply inversely proportional. So that the less there is of the former, (a), the more there is of the latter, (b). And inverse proportionality is, tautologically, a reversible procedure. Hence, conversely, the more there is of (a), the perceptual element, the less there will be of (b), the improvisation. Until finally, and when (a), the perceptual element, reaches its total capacity, as it is with the photographs, (b), the subjective contribution, will be completely eliminated. Kuhn misses his own point!

Other than that, Kuhn is not so much a foe of mine in this search for objectivity, as he is a precious ally. I intend to argue that too much mental activity, amounting to full scale improvisation, leads to subjectivism. His duck-rabbit phenomenon, if not indeed his entire philosophy, proves my case for me. I intend to argue that active ‘knowledge’ is epistemically unreliable, and this idea he has gone out of his way to champion. His Paradigms literally “make us see things” [p. 110 ff.], whereas other researchers, in other Paradigms, will see different things instead. Not even Kuhn can afford to consistently describe this phenomenon as reliable knowledge, when varying from one paradigm to another, though I do suppose that he would call it knowledge, while I won’t. The sole difference between us is that he dismisses the possibility of passive knowledge and I do not. And even at this point there is considerable convergence; he wants to abolish passive knowledge for the exact same rea-

son that I want to reinstate it: Because we both know that, once there, it is *compelling*:

When I turn from the experimental to the theoretical problems of normal science, there are seldom many areas in which a scientific theory, particularly if it is cast in a predominantly *mathematical* form, can be directly compared with nature. [Kuhn, 1970: p. 25].

This is one of the most straightforward descriptions of scientific realism that I can think of. And one of its clearest of explanations of both: the reasons why it is eventually abandoned, when it shouldn’t, and why there are such things as Paradigms in the first place. The “predominantly mathematical form” is just another way of saying that there is too much abstract speculation going on and too little feedback with reality. That is to say, too much active output and too little passive input. And it is because of this that much of what Kuhn says about paradigms, and the way they make people see things, is actually quite true. The areas that Kuhn speaks of abound with “duck-rabbits”. Hence, having severed themselves completely from the realm of passive receptivity, the only solid constraint capable of keeping them in line, all that scientists have then left to go by for establishing contact with reality are duck-rabbit apparitions, the sole quasi-entities now suitable for even barely providing a match with all those unfathomable mathematical abstractions. The scientists then “see” in anything they can lay their hands on a confirmation of their theory. This is why “different paradigms make us see things differently (research workers in different paradigms have not only different concepts but also different *perceptions*) making them fairly immune to difficulties”. [Feyerabend, 1978: pp. 66-97; italics the author’s.]

They do, because due to their predominantly mathematical form they transpose us into areas where there *is* nothing to see and where, occasionally, even duck-rabbits as such we should consider a lucky break. (See last Section.) Then the “duck-rabbit effect” takes over and does the rest. Kuhn knows all this only too well, but seems prepared to accept it as the “given” and proposes no steps towards a remedy. Kuhn *likes* this situation, because it is ideologically exploitable, earning for him the title that J. J. Katz has conferred upon him: One of “the new philosophers of science” whose contribution “is not in their philosophical doctrines but in their *sociological* doctrines” [Katz, 1978, p. 329]. This is a praise I myself could well do without.

Grabbing at duck-rabbits now bears the stamp of a communal practice, a “form of life”, in whose service this working paradigm is originally devised. Even *values* infiltrate in this investigation of a once inanimate reality: “‘True’, like ‘good’, is an institutionalized label for sifting belief or action according to *socially* established criteria.” [Barnes, 1974: p.22.] The result of too much active theorizing, on the one side, now obliquely adopted for the sake of communal solidarity and human brotherhood, and too little involuntary bumping of scientific heads against walls, on the other, naturally culminates in the new phesy:

The key point is that insofar as science is theoretical knowledge there is no reason why it should not be subject to sociological causation. Once beliefs are conceded not to derive completely from the constraints of reality, no further argument can be made against their sociological investigation. And the problem of the *validity* of the beliefs in question is beside the point in this regard. [Barnes, 1974: p. 12].

This, we might say, is an honest statement, perhaps even a brutal one, of the (so-called) “hard” programme of the active knowledge campaign. Abstract science is a suppressed form of

social symbolism and to be treated accordingly, with all due disrespect. It has lost all contact with the pressures of reality, the passive element, where we are helpless to aught else but conform. Helplessness is the key to objectivity, freedom of mind the way to rendering validity “beside the point” and *choice* the master of all truth.

So it will have to be in terms of helplessness that I too must state my case. The following principle, therefore, I will deliver as the tautology which it is, on Kuhn’s and Barnes’s direct authorization: What I *know*, I cannot help, though I can help what I don’t. And were I able to help it, God help me. For then I would, by definition, turn it into something of my own making and, therefore, by definition something other than it is. And, therefore, by definition, no longer something that I know. Which is exactly what the two subjects did to the duck-rabbit. And exactly what the mathematics did to the physics. They are all instances of knowledge helped along too much on our side and too little on the objects’.

It is high time the papally infallible dogma, that real knowledge only comes through the activity of the human mind, be questioned. And high time to fight fire with fire. To the hard programme of relativistic epistemology, declaring that even strictly perceptual knowledge is active, I will level a harder programme of my own: *Even strictly conceptual knowledge is in-active*. Previous rebuttals apart, a telling defense of that hard programme would really turn the tables to Social Text epistemology, if anything ever would.

“Busily Subsuming”: Exactly What the Skeptic Most Desires

The best place to look for strictly conceptual knowledge, hence knowledge purified from all reference to sensory perception, is Kant’s a priorism. They don’t come any more conceptual than that. The choice is well warranted because, in addition, Kant’s epistemology is a nonrealist one, exactly of the sort avowedly preferred by activists. Showing, therefore, that even *such* an epistemology is actually wholly passive, will only double the satisfaction and hurt all the more.

The objectivism of Kant’s philosophy, though the word be present nearly after every other page of the text, never drives itself home, because it is a *subject* dependent objectivism and this, on the face of it, is sufficient to confuse any reader, however trained in Kantian theorizing. One can only imagine what chaos it will cause to the untrained! The expression seems a contradiction in terms. All Kantians solve it as best we can in the early stages of our initiation, by supposing that what Kant means here, is a form of subjectivism so total and encompassing, that there is nothing objective left to contrast it *to*, which seems to result to the same thing. But Kant was hardly the kind of philosopher who would seek to attain objectivism by merely stressing its absence. And his objectivism reaches far deeper than our being merely unable to tell the difference.

To realize this one simply has to see the extent of the distortions imposed upon his philosophy, once modern day cognition activists, but otherwise uninstructed in matters of a priori theorizing, feel bold enough to get their hands on it, as they have no business doing. Reading their accounts is all it takes to perceive in zero time, that what they say of him is the last thing, which Kant can afford to say and not turn suicidal. Here is one such account, the best of its kind:

It is well known that Kant thought that a priori knowledge of synthetical propositions is possible for us only because these propositions are *made* true by what a man *does* to his percep-

tions. [Machina, 1972: p. 484.]

What is, in general, a proposition which is made true? Well, one which is *not* true, I would think. Why else does it take someone to *make* it true in the first place? Thus, Kant’s idealism at this stage is seen as the doctrine of succeeding (?) to somehow turn false propositions into true ones by what we *do* to our perceptions. For that, indeed, the active element can do. True enough, this author does not speak of contingent synthetic propositions at all but of synthetic a priori ones, which latter he labouriously manages below to divest of factual content, thus escaping absurdity by the bell. But by insisting on those latter, he invites absurdity in through a different door.

An *a priori* proposition, be it synthetic or analytic matters little in this connection, is a proposition which we simply do not have the *time* to “make true” because, *qua* a priori, it would have to be true before we even started making it so. This is what an a priori proposition (Kant prefers judgement) is all about. Of course, this is not a problem specific to this reader of Kant’s text. It is an independent problem of Kantian epistemology. One which has led P.F. Strawson to declare the entire theoretical programme of the *Critique* incoherent [Strawson, 1966: pp. 39-42 & 247-263, but, actually, *passim*.] A priori judgements, that is to say, necessary ones do not *begin* to be true at any time, for then they would not be true at all prior to that time. Let alone necessary. To put the point as plainly as I can, a necessary truth *makes no room for the subject*. [See Antonopoulos, 1898, 188] So Kant seems to be demanding the impossible, if charitably read, or simply saying something incoherent, if uncharitably. I am not a fan of charitable readings myself. But, as I am about to show, Kant has no need of them though some others certainly do.

The first thing to realize, therefore, is that Kant’s idealistic supposition, said to be responsible for transforming the world into lawful obedience, whereas in “itself” it has none, *cannot be an event in time*. Once this much is documented, the “active knowledge” cliché is dealt a lethal blow. Whereas Kant’s favoured term, *transcendental* idealism, gradually begins to form itself into shape. What we “do” to our experience, to use Machina’s mischosen words, is not even a *part* of experience in the first place. It is transcendental; in other words, something which experience cannot even reveal. The *active* reading of Kant’s idealism, as a support of the relativistic trade, is certainly out, whatever else might befall his doctrine. Coherent or otherwise, the doctrine is clearly not about an *active* knowing subject at all. As that would certainly make it incoherent at the very outset. The proper reading of Kant’s “synthetic a priori” rules out this much at least, i.e. the supposition that a judgement can be true a priori due to *our* cognitive activity. If a priori, it would antedate *any* activity. Consequently, conceptual knowledge can only be active at the pain of incoherence. And if that cannot be active, what other can? But Machina still hopes otherwise:

Whenever we find a human being who has experience of this objective (?) sort we can be sure he *believes* all the group of synthetic a priori propositions and is *busily subsuming* his perceptions under the concepts employed in these synthetic a priori propositions [Machina, 1972: p. 488].

But beliefs are by definition revisable. Synthetic a priori truths by definition are not. So this promises to be a really incongruous marriage. Indeed, it results in the only way such a marriage could:

Similar remarks can be made about the other most important categories, cause and effect. One can take *any two* perceptions and *decide* to make the first one a perception of one event

which caused the event perceived in the second one provided only that one does not thereby contradict some other belief [Machina, 1972: p. 494].

Provided. Though it would tend to become a bit of a task to remember all the other “beliefs” I have held so far in my life, not to keep confounding which is which and which should be the cause, which the effect. And, assuming I could, would others? And when it comes to the beliefs of others, when compared to mine, the matching would become even harder to attain. You’d say the billiard ball set the second one in motion, I might say it smashed it to pieces, given the extrinsic nature of all causal relations. What do we do, when we see the wind bend the tree? Exchange memoirs with each other, to make sure that no belief is contradicted? I myself always thought that *seeing* the tree bend under the wind is all it takes to realize that the one is the cause, the other the effect. The incident is intuitively certain. And then “some other belief” is irrelevant.

“Any two” says Machina, conscientiously referring in his text to Kant’s Transcendental Schematism in all places, but learning little from it. For for Kant not just any two, but only *irreversible* sequents of perceptions (ordered pairs) qualify for a causal treatment [CPR, B233, ff]. And the very term “irreversible” refers to phenomena whose succession in time we are powerless to reverse. Hence, irreversibility, a necessary condition for causality, is already *there*. And not something we “decide”.

Now to “busily subsuming” as such. Suppose I (busily) subsume “any two” perceptions of mine under the causal nexus, christening the first perception a cause, the second an effect. Busily subsuming takes some time, until the final christening. What *were* these perceptions during that time and prior to christening? Were they phenomena or things in themselves? Machina would retort that they are phenomena *eo ipso*, if they are perceptions. But I would point out that, if phenomena *eo ipso*, they are *already* subject to the category of causality *eo ipso*. Just as *eo ipso*, in fact, as they are phenomena, to begin with. And then there’d just be no time, or need, for Machina’s busily subsuming. It appears that his human being cannot have very much to keep it busy after all.

Nor does Kant’s philosophy afford us with a third route, neither phenomena, nor things in themselves but something in-between. That, were it admissible, would surely rip the whole plan to shreds, because it would only mean that as yet un-categorized perceptions would keep one foot at least implanted in things themselves, which are therefore much closer to us than claimed (*infinitely* apart, says Kant) and possibly knowable. Either, therefore, we are keeping busy with only God knows *what* in our hands until the christening, or else we’re simply *idle*. And the job has already been done for us. It must have, *a priori*.

The case, actually, has as follows: (First) I perceive; (then) I categorize, i.e. I subject the perception to a category. Hence, if there be a *rift* introduced or allowed between the first stage and the second, namely, if the perception can subsist in consciousness without having *yet* been subsumed under a category or, indeed, all categories, then we have in our hands a perception which, for a certain length of time $t > 0$, answers to *no* category! That a thesis such as this is attributed to Kant from within the pages of a journal such as that of *The Philosophical Review*, is a matter that is certainly worth noting.

For, indeed, what *is* the perception which, for a certain period t , does not answer to a category? Not a phenomenon, surely, for for these latter Kant has explicitly declared that categories are their very *possibility*; that is to say, their very

possibility to *be*: “The objective unity of the original apperception is thus the *necessary* condition of all *possible* perception” [A 123]. Is then Machina implying, perhaps, that it may be a thing in itself, and still writing a paper on Kant? There has never been a destruction of the Kantian text more total than this, though to no fault of the original. Consider, if you will, our prospects for handling the situation, “not answerable to the categories”. Does it mean, perhaps, that the perception is UNFIT for the categories? For if it were fit for them, instead, the other remaining alternative, then it would satisfy the categories *eo ipso*, exactly as it should. And there would then be nothing to keep us busily subsuming. We would simply be recording the fitting, not fabricating it, as Machina would have us all believe.

And if the perception is UN-fit for the categories (during t), then heaven help us all, Kant above all others. For then their union a *lá* Machina would just breed a contradiction. We would be simply fitting things that do not fit. And, if only to complete the disaster while we’re at it, if the perception is unfit for the categories for any period t , it is unfit for them for ever. For either the “perception” will then have to undergo a change in order to be “*made*” to fit, which is Machina’s favourite way of turning falsehood into truth, which change, however, will have to lay hold of *causality*, if to at all do it, i.e. a category of the sort we have just admitted does *not* presently apply, or it will be challenging the validity of the categories for all time to come. This and this alone is the true cost of attempting to read Kant’s idealism subjectively. That is to say, actively.

Finally, to the application of the category of causality *per se*, an affair far more tricky than it looks, as the previous, preliminary analysis has uncovered. Suppose I have the power (invested in me) to decide, once and for all, which perception is the cause and which the effect. The bothersome question still won’t let go. Are they cause and effect just *after* I so decide or are they *so before* I do? If just after, then these two perceptions are not the first a cause, the second an effect, and therefore I should not have decided as I did. So, when I do, I do something false. Suppose then they are the first the cause, the second the effect *before* I even apply the principle. Then, obviously, they need no help from me (or the power invested in me) to be the first a cause, the second an effect. They are such already. I have been “busily subsuming” my perceptions under my concepts for nothing. If I get overactive and subsume them, when I should not, I simply misrepresent and distort reality. And if I do not subsume them, who does? Machina turns to psychic compulsion in this hour of need:

Because [...] *we ourselves are constructed in such a way that we cannot help* but include these features in these perceptions [Machina, 1972: p. 487].

Now observe first hand what Kant has to say about *this*:

The concept of a cause, which expresses the necessity of an event under a presupposed condition, would be *false* if it rested only on an arbitrary *subjective* necessity, implanted in us (!), of connecting certain empirical representations according to the rule of causal relation. I would not then be able to say that the effect is connected with the cause *in the object*, that is to say necessarily, but *only that I am so constituted that I can not think this representation otherwise than as thus connected*. This is exactly what the sceptic most desires. For if this be the situation, all our insight, resting on the supposed objective validity of our judgements, is nothing but sheer illusion [CPR, B168.]

Regrettably. (For the *Philosophical Review* no less.) This humdrum, down to earth, interpretation of the Kantian text is a symptom. Not the sickness. Underneath lies the influence and

even the indoctrination of all the active-knowledge ideology which has gone into Machina's calmly proposing all of the foregoing, without a moment's hesitation as to how can all this *be*. He is one of those trained with the idea that we can mold the world in our thoughts in any way that pleases us and get away with it handsomely, without so much as a consideration of what goes on out there, that would make us look silly. Why, we could even say that donkeys fly, when unobserved, if "we ourselves are constructed in such a way that we cannot help" but think so.¹

This, in short, is the consequence of a philosophical training which, for humanitarian reasons, has conditioned and accustomed trainees to the idea that *there is no right and wrong*, (we are all equal in our ignorance), no truth and falsehood, no hell to pay if we falter. The thing we call knowledge is expendable in any event. The rest is then a mere formality, especially when a person of such training investigates the works of an idealist, explicitly appearing to rely on the human subject. If all the rest is so, he reasons, one can only imagine what an idealist is capable of. The humdrum interpretation is then only an off-pring.

Parts of A Whole: The Passive Side

Kant's initial problem of the Transcendental Deduction is to show how logically separable entities can still be subjected to (what we might call) an "organic" connection though not in an organic context. As if the connected items were somehow meant for each other, like the notes of a melody. The pressure he was under was bequeathed to him by Hume's analysis of causality [Hume, 1968: pp. 78-81], which just about tended to imply that cause and effect were almost foreign to one another. Kant was too quick to accept the analysis, but not that quick to accept the foreignness. This is what gave rise to the idea of synthetic a priori judgements. The causal connection was synthetic, just as Hume had shown, but necessary none the less. The thing to do, then, was to show that there can be "organic" connection even between logically unconnected entities.

This is the role assigned to Apperception, alias referred to as the "transcendental consciousness". The first thing to notice is that this consciousness is transcendental; not empirical. Left on its own it is the consciousness of nothing whatsoever. And therefore not a consciousness. (Viz. the active element.) This consciousness is not only transcendental. It is also possessed of a transcendental *unity*. It is a whole onto itself, whose (putatively) outgoing components can not be outgoing at all, because held fast together as an undivided whole, almost collapsing on one another. Apperception, thus conceived, is a *singularity*. Kant calls it a "numerical unity" [CPR, A108] which is a term even more inactive than my synonyms. It is now not too difficult to see, where Kant is going with all this. His plan is to utilize the unity of Apperception, of the transcendental consciousness, as a foundation for the unity of its contents. The idea is sound and it deserves a good deal more of credit than it has received, at least on the part of non-Kantians. How can a unity, a whole onto itself, ever tolerate contents which *resist* their mutual unification, i.e. resist becoming the parts of any whole, *and* be *its* contents at the same time? How can it even survive the possibility *and* stay true to its permanent nature?

Kant replies in the negative and he is quite right to do so.

¹Under no circumstances should Mackay's helplessness be confused with mine. His is a kind of psychic compulsion *not* to act. Mine a helplessness *to* act, which antedates all compulsion, for there is nothing left *to* act upon.

Every representation of mine must be such, he argues, as to be always capable of being accompanied by the "I think". By the "I think", to be exact [CPR, B132, ff]. The "I think" is evidence of mental ownership. My representations are *my* representations. The emphasis and the ownership are not about a dispute between the two of us, of the sort "whose is this? mine or yours", claiming exclusive propriety. They are only intended to stress that if mine, they will be mine as my shoes are mine, or Cinderella's hers. That is to say, the shoes which *fit*; the *right* shoes for me or Cinderella. Just as I cannot wear shoes which do not fit my feet, so also can I not maintain *representations*, which do not fit my mind. If my representations are to be invariably accompanied by the "I think" in the said connection, they must be the right *sort* of representations to satisfy the requirement. In a word, such as they will always be parts of a unitary whole. And therefore unifiable *per se* contrary to Hume's objections.

Recent developments in physics concretize this Kantian conception in ways that Kant himself would not have thought possible. Quantum theory, in nearly all of its other aspects a bitter disappointment to Kant, were he only around to see them, regarding his insights of the Transcendental Deduction provides an amazing confirmation. Any two things connected to an indivisible whole will themselves be indivisibly connected, if to be at all connected with this whole. This is the Bohrian conception of quantum wholeness, profoundly conceived but, as a rule, poorly described by its conceiver. I choose David Bohm's description, for (remarkable) clarity. It is the description of how an indivisible quantum can be transferred from one object to another:

The quantum must somehow belong to *both* objects and yet be indivisible. This is possible only if the combined system consisting of the two objects is, in some sense, an *indivisible entity* which cannot be analyzed (even conceptually) into more elementary parts [Bohm, 1967: p. 89].

The quantum under transfer from one object to another, *i.e.* originally a different object, is indivisible and cannot be distributed among them. (There are no fractions of a quantum. It is an atom.) If it could, then always and during any stage of the procedure the quantum could belong partly to the one object, partly to the other, distributed among them evenly or unevenly depending on time, until completely transferred, in thoroughly classical fashion. But the quantum is indivisible and cannot be thus distributed. How can it then belong to two, *separate* objects without contradicting the theory? Simple (once we are told the answer, that is). The two objects cease being two, becoming *one* indivisible entity which we cannot analyze even conceptually. The indivisible quantum joins them as a single, undivided unit. Kant is therefore quite right. A pair of initially independent, unconnected entities will become connected, if, coming from different routes each, are to be both connected with a *self-connected*, *i.e.* an indivisible entity. They will all form an undivided, unitary whole.

Now to our main question, starting from the indivisible quantum, indivisibly connecting the two objects. Does the quantum *do* anything, to accomplish the resulting indivisibility of the two objects? Or does it simply remain throughout the uniting process exactly what it is? Thus doing nothing in particular, except staying true to its own nature? I submit the latter. Action is a form of change; the change from *inaction*. If no change is noticeable, no action should be. In Machina's accounts of our cognitive activity, for instance, "the man is busily subsuming" his perceptions under his concepts. Being busy here is to be contrasted with not being busy and is therefore a change. In

acting (busily), the man is now in a state he was not in before. Is this description at all true of the indivisible quantum? Far from it. The quantum *stays* indivisible during the transfer, namely, exactly in the state it was before the transfer began; the state of indivisibility. It is therefore doing nothing. It is the interacting *objects*, if anything, which undergo whatever transformation is necessary in order to *participate* in the whole. “They become one” we usually say, when describing this weird quantum wholeness in our texts. *They* become. The quantum, as such, is a constant. It neither rises nor falls, neither grows nor diminishes. It does nothing. It is a constant. And so it is, then, with Apperception.

It is the *objects* of Apperception which will undergo the change, in order *to* become its objects, conforming themselves with the unity requirement, namely, become what they must become in order to participate in its whole and be accompanied by the “I think”. In itself considered, Apperception remains throughout the uniting “process”² exactly what it had been before it ever started. No change, no activity. To put the point in Machian terms, Apperception is not all that busy during the “process”.

With the issue of activity is connected the issue of *time*, activity being an inherently temporal kind of entity. So it is high time we introduced the element of time in the procedure, crucial, as we have seen, in determining just *when* a synthetic a priori truth begins to be true, in other words, when exactly does the process Kant calls the “transcendental synthesis of the manifold” begin, to finally result in the sort of experience which we have. On the one hand, we have Apperception. On the other, its contents. Suppose first, as I have repeatedly already, that the unifiability of the contents of Apperception, i.e. ultimately of the phenomena, obtains within its boundaries at a time *later* than their first ever entry in its realm of jurisdiction. The problem is once again immediately apparent. If unifiable at a time *later* than their entry, there will be a finite time interval inserted, during which the contents of Apperception are *not* unifiable at all.

And it would then be too late to unify them. For to say that what has been unified in the end, were *non*-unifiable items before the process started, is a verbal contradiction. One can only unify *unifiable* elements, the Apperception included. Otherwise, the job can’t be done. The proposition is a tautology and Apperception, whatever other powers it may be said to possess, certainly cannot defy a tautology. Take the simple case of broken vase. Given that no broken piece is missing, we can glue the vase back together in one piece. Can we do that, if the broken pieces belong to different vases, differently broken? We cannot. The broken pieces have to be unifiable *before* they are to be unified. Unifiability is not a property indiscriminately ascribable to anything we choose to ascribe it to (“decide” was Machina’s term), independently of its own nature. Certain things are unifiable, certain others not, and the latter we cannot unify however hard we may try which goes for the broken pieces of the same vase too, if any two of them provide a mismatch.

Kant is well aware of this:

If this unity of association had not also an *objective* ground [...] it would be entirely *accidental* that appearances should fit into a connected *whole* of human knowledge. For even though we should have the power (!) of associating perceptions, it

would remain entirely undetermined and accidental whether they would *themselves* be associable [CPR, A 122].

There must, therefore, be an objective ground upon which rests the possibility, nay, the necessity, of a law that extends to all appearances a ground, namely, which constrains us to regard all appearances as data of the senses that must be associable in *themselves* and [hence] subject to universal rules of a thorough going connection in their reproduction [ibid].

But if associable in *themselves*, they are not made (far less, busily made) associable by *us*. The active mind option is eliminated. In consequence, the contents of Apperception must be unifiable *before they even enter* its boundaries. Which means, unifiable in *advance* of their imminent entry. In other words, (Kant’s), unifiable *a priori*. The doctrine of Apperception is thus a *filter* theory of the mind, not an imposition theory about it, always implying a time before and a time after the imposition, consisting each of mutually incompatible elements. It is, if you prefer, a mind-world *matching* theory, which is hardly any different from the filter version. What will filter through is *eo ipso* what matches. Kant is quite straightforward about this:

The objective ground of all association I entitle their affinity. [...] According to this principle all appearances, without exception, must *so enter the mind* or be apprehended, that they *conform to the unity* of apperception [CPR, A 122].

Or if not, not. This, then, is idealism. And it is a theory about the nature of *reality*, i.e. an ontology, and not a theory about the nature of thinking, as Machina makes it look, i.e. a type of *psychology*. (e.g. cognitive psychology.) An idealism which is so unlike the “busy subsuming” of Machina’s, that all the subjectivism concomitant with philosophical mediocrity is eradicated across the board by the touch of philosophical greatness. The greatness of showing how, what initially seems a *subject*-dependent picture of the world, with all its shortcomings and problems of *belated* impositions, and how it can all still be “a priori” in this way, now turns out to be hardcore objectivism in the end, and this on the selfsame initial premises. If appearances must *so enter* the mind, as to conform to its requirements, the mind, primevally Apperception, neither has the time nor the need to do anything further. Hence, the need to do *anything*. Being associable in themselves, is an *admittance condition* for appearances, their transcendental ticket to experience. It is not therefore something which the Apperception *does*, busily or otherwise, which, as activity, can only be *a posteriori* (an event in time) and therefore *the* thing unsuitable for a priori knowledge of the sort Kant strives after:

The synthetic unity of consciousness is an *objective* condition of knowledge. It is not merely a condition that I *myself* require in knowing an object [viz. what I *do*], but is a condition under which every intuition must stand in order *to become an object for me* [CPR, B 138, brackets mine].

The unity, therefore, that Kant speaks of is not to be found in the *handling* of my data, like Machina’s “busy subsumings”. The unity that Kant speaks of is in the *having* of data altogether. The handling of them, i.e. the ordinary process we are all familiar with, when we think, and which does fall within Machina’s narrow specifications, is merely *derivative*:

Only the original unity is objectively valid; the *empirical* unity of apperception, upon which we are *not* here dwelling, and which is merely *derived* from the former, has only *subjective* validity. The unity of consciousness in that which is empirical [viz. the “busy subsuming”] is *not* necessary and universally valid [CPR, B 140, brackets mine].

Transcendental unity of the manifold, therefore, is not some-

²The word must not taken too literally. I am using it only in want of another. “Process” is an entity signifying a development through time. But the “process” referred to in this context is atemporal.

thing *imposed* upon phenomena, which would make it subjective in origin and contradictory in constitution. It would not be transcendental, if thus imposed. It is the ‘mechanism’ by means of which phenomena are to primevally *originate*, and so to be given. If unifiability is an admittance condition, the contents-to-be of Apperception are unifiable *a priori*, as all potential parts of a unitary whole must be, and since they are *already* unifiable, there is little that Apperception, or “we” are called upon to do thereafter, except, of course, integrate the process.³

The passive side wins. For what is *a priori* so, as remarked, leaves no room for the subject and its (alleged) activity to do anything. Let alone, interfere. And if the subject cannot do anything, or interfere, subjectivism is rebutted. We have no say on the matter. Not as far as Kant is concerned at any rate.

The Busy Element: Conclusion

Time to say a few words on what really happened to Machina, apart, that is, from presuming that he can comment on a difficult philosopher, whose works he knows little or nothing about. Machina does not offer an implausible account of human mental activity, perhaps not even an incorrect one at that. Nor is it true to suppose, besides, that Kant himself denies such activity. Far from it. The difference is that, when it comes to the philosophy of Kant, Machina is looking for it in the wrong place. It belongs to an altogether different mental faculty. Reason.

The keeping busy side of our mental operations, though clearly there in Kant as much as in any philosopher or any man (no reason whatsoever to deny its presence even in Hume), is not the business of Kant’s *idealism* to explain and describe. It is not, because as Machina also says, it concerns what we consciously *do* with our perceptions and is therefore, unlike Apperception, whose workings are undatable, an event in time. It belongs to the sphere of the *empirical* subject, the self-conscious man given to the process of thinking and drawing conclusions, not to the transcendental subject, which is an *un*-thinking state, idle onto itself:

There are three subjective sources of knowledge upon which rests the possibility of experience in general and knowledge of its objects: Sense, imagination and apperception. Each of these can be viewed as *empirical*, namely, in its *application* to given appearances. But all of them are likewise a priori elements or *foundations*, which make this empirical employment itself possible [CPR, A 115].

“Busily subsuming” an instance under a category, therefore, in other words, its application, is emphatically declared by Kant as an empirical affair, viz. what the self-conscious individual performs in time and place, which is to be *distinguished* from the corresponding, transcendental function of these conditions, and which lays the foundation for their ensuing empirical employment. Machina has mistaken that which results from a certain operation, as *being* that operation. The empirical, or conscious, subject only extends into the world that substratum, which the transcendental subject has furnished in advance of such extension, and *for* it. The former, to be identified with the conscious, thinking “man”, is an object of psychology (cog-

nition) as it is, in fact, of any discipline. The latter, the transcendental subject, viz. Apperception, an object of Metaphysics. What Machina describes is a theory about *man*. An anthropology. But what Kant ascribes to Apperception is a doctrine about the nature of reality.

And the conscious mental operations of man, as opposed to the nature of reality, are for Kant stuff which belongs to the province of *abstraction*. They are therefore, properly speaking, the business of Reason, not of the Understanding. Reason, yes; is busily (or lazily) always trying to subsume our perceptions under our concepts, provided they *are* subsumable in the first place, which however is a matter that has already been settled elsewhere, in the way I have explained. Reason may occasionally even have to “decide”, which perception is cause, which the effect, by bringing order to an otherwise messy empirical material, provided there are such things as causes and effects in the first place, which however is again a matter that has been already settled elsewhere, in the way I have explained.

In thus busying itself Reason is engaged in the process of building *theories*. Not in the process of making *judgements*, which is the province of the Understanding to make. For theories are made of fact stating propositions and facts are, by Kantian definition, not the province of Reason at all. They are the province of the understanding. And the unity the understanding brings to a fact, e.g. “if cause A, then effect B”, is not itself a theory at all. It is a fact-stating, in this case a causal, judgement, immediately tied to experience, not to theorizing.

It is therefore one thing to treat a causal judgement as an instance of the part-whole relation and an altogether different matter to treat a *system* of causal judgements as an instance of the same relation. The former, which is not a theory but, as said, a synthetic judgement, can, as concerns validity of connection, be synthetic and a priori. It would however be a joke to try and say the same about a theory. Theories are not synthetic a priori truths. They are not even synthetic *a posteriori* truths, if it came to that, the way things are going in science nowadays. Synthetic a priori judgements are necessary and, strictly speaking, their opposite is inconceivable. But *systems* of interconnected synthetic a priori judgements, i.e. theories, are anything but necessary and, strictly speaking, their opposite is anything but inconceivable. So far as I’m concerned, quite frankly, their opposite is much rather God’s honest truth at times. (See below.)

In other words, what knowledge has gained in terms of abstraction, namely, active thinking, it has lost in terms of reliability, namely, in terms of the passive state we all experience, when we cannot help but concede, however much we struggle not to. Knowledge valid for all subjects is knowledge forced upon us, knowledge coming from helplessness to do otherwise, from what we are powerless to affect or change at will.⁴ It is for this straitjacket of a feeling, that philosophers have coined the term “necessary knowledge”. And speculating on the basis of what was once solid physical evidence, which is what theories, namely, abstractions are all about, is hardly the sort of thing we are helpless with. It is the very essence of what we *can* help. It

³In other words, turn unifiability to *unity* by seeking out the ways in which error fashion of making the unity *actual*, as we would with the broken vase. Only now in experience, that is to say, consciously and a posteriori. This derivative synthesis, which is active, is to be distinguished from its transcendental origination, which is primitive and *inactive*. It is, however, justified by the former, for it only unifies the unifiable.

⁴Some would point out that we are equally helpless in the face of a contradiction. And the discovery of a contradiction is the product of the active, not the passive mind. This, though true, makes little difference to my case. First of all, contradictions are *discovered*, not created so that they *can* be discovered, which is what “active knowledge” claims for its own products. And once they are discovered, we are powerless in treating them as anything save as what they already are; i.e. contradictions. Secondly, those who might contemplate using that argument against me, should ask themselves first, how are contradictions at all possible in the first place. If not as products of the *active* mind, then as what?

is in this sense that I have warned the reader, that the more we help what we know, the less we know what we help. Which are also Kant's sentiments exactly, when it comes to speculation, his top favourite word for referring to the activities of Reason.

As a consequence, Kant has as notoriously little faith in Reason, which he almost despises, as he has notoriously great faith in the Understanding, which he almost worships. Take a look at the things he charges it with: The title of his work is the *Critique of Pure Reason*. Not so much as an iota of a critique of the Understanding. The products of Reason deserving the critique are the *Paralogisms* of pure reason and the *Antinomies*. The former, [CPR, A341-405, B407-432], are just fallacies that can be detected and set aright. The latter, [CPR, A406, B433-A 567, B595] are logical conflicts which are not fallacies at all and which cannot be remedied. And that, if anything, is worse. They are for Kant inescapable results of what happens to the human intellect when it abandons experience and plunges deep into abstraction, *i.e.* into what common men and philosophers alike unanimously and spontaneously call metaphysics.⁵

This, according to Kant, is the product of what he calls "the architectonic tendencies of pure reason" (see, in this connection, the notorious "unified theories" of Physics), invariably leading it astray and into areas that knowledge has no business to enter. After a series of compound abstractions, all done in fashion which *Machina* would have every reason to call busy (too busy), Reason is led step by abstract step so far from experience that all which is then left to it are *vacuous* concepts, unrelated or even inconsistent with the laws of experience, which concepts Kant somewhat benevolently calls "Transcendental Ideas". And which Kuhn, speaking in more modernized terms, has called "scientific theories cast in predominantly mathematical form, seldom capable of being compared with nature". Not a word of what Kuhn says here is to be disputed. He tells it as it is. So, then, does Kant no less, the difference being, however, that what was then to Kant anything but science, and only stuff to be mocked at, to Kuhn is science, since observing a standard social ritual, and claimed by him to be the only kind we can have. And so the best there is.

This is because, contrary to what nearly everyone supposes, Kant is essentially an epistemological passivist, possessed of an inborn distrust for too much wild theorizing, while Kuhn is a self-avowed activist, who needs this activity, if to at all earn the dubious praise Katz has conferred upon him, of a philosopher, whose contribution is to be found in his sociological doctrines, not in his philosophical ones. It is this activity and this alone which opens the door to the *social* investigation of "thought in its speculative employment", as Kant would put it, an investigation well deserved, when knowledge yields its place to socially useful mythology. Because speculation, unfettered as it is by the pressures of reality, more often than not cries out as to its predictable origin: Ideology, and how it can be served together with our putative interest in truth (or our pretenses at one).

The study of the natural laws which keep a boat afloat, when investigated in terms of their social production, promise far fewer humanitarian rewards and paradigm secured equalitarianism than, say, Big Bang cosmology, the modern day version of "Fiat Lux!", whose ideological roots are just too obvious to

⁵Though this is a commonplace fact in itself considered, Kant interestingly recasts it in the context of his own theory. He attributes the Antinomies to the non-empirical employment of the concepts of the Understanding, the categories, now applied *not to their natural recipients*, their empirical instances, as they should, but employed "purely", something which for Kant is a horrible epistemological crime. The move is from "what causes rain?" to "what causes the *world*". A full scale categorical leap.

miss. The more physical a theory is, *viz.* the lesser its degree of abstraction, the less relevant, or desirable, its social investigation becomes. The sociological account of how the iceberg sank the Titanic by puncturing a hole in its hull, would raise many eyebrows. A sociological investigation of Big Bang cosmology, by contrast, the virtual epitome of active knowledge at the top of its performance, not only is well warranted and profitable, as Barnes urges. It is imperative, especially for people like myself. For being in the sad state it is in, it is difficult to ascribe its public success to any other reliable factor.

The difference is that for people like myself the need for its sociological investigation is not its rescue, or even a cause for sympathy, as it is with so many others, but its damnation. For when it comes to scientific theories thus produced, though their sociological investigation may be anything but awkward, in fact it is of considerable importance to knowledge, there may yet be plenty of awkwardness to be found in their other departments. Themselves, to start with. Their paradigm creation, if nothing else, has taken care of that. Here, then, is a sample of active thinking employed in its speculative capacity, the sole, besides, it is capable of. Cosmologists assure us that their Bang created the universe. And therefore space-time. Well, if it has created space, it cannot have occurred *at* a place. And if it has created time, it cannot have occurred *at* a time either. Some explosion this is. But let's be positive. The *social* role of the idea compensates for whatever it lacks in the other departments.

Here now, by comparison, is philosophical greatness once again, hand in hand with cognitive passivity, when Kant, in his *Transcendental Aesthetic*, declared Space and Time to be *a priori* concepts (intuitions, rather⁶), in other words concepts, whose unconditional satisfaction constitutes the very possibility for any phenomenon to even appear, or exist. No event can defy space and time because, necessarily, events can only occur *at* a place, *at* a time to even *be* events. But active knowledge and its faithful, the paradigm theorists, will have none of that totalitarian talk and its arrogant exclusion of alternatives. After all, absurdity is paradigm dependent. So, alternatives there must be. Those being what else? Rival, incommensurable paradigms, where the excluded, absurd alternatives are not just perfectly coherent, but can even be actually *seen*.

Let us then follow up and see the "seeing". The Big Bang is but the opening stage of what cosmologists proceed to refer to as the "universe expansion theory", the contention, that is, that space actually grows, therefore taking up more of *space*, than it previously did. To do that, of course, space would have to be larger than it is. For what grows, takes up more of *space*, than it previously did. And so, therefore, must space itself. And hence there has to be more, namely space, of what, however, there is yet *no* more, namely space. I myself would say that space is not larger than it is. But paradigm epistemology, with its incommensurability and everything, can surely overcome this slight difficulty.

All it takes, really, is just the right amount of "creative observing" and the job is done in style. Nor are paradigm addicted scientists, for physicists they are no more,⁷ likely to ever run out of either such observing or such paradigms, when needed the most. This is what paradigm philosophy is all about. So here goes, even if the passage that follows is hard to believe is

⁶Kant prefers "(pure) intuitions" to "(pure) concepts", though alternating at will between them, for an excellent reason. Concepts, such as "man" or "horse", have *instances*, whereas space and time do not. Spaces and times are but parts of a singular space and a singular time, given all at once [A 25, 32].

⁷It is clear at this point that we can no longer afford to treat the terms "physics" and "science" interchangeably, much less so as they feature in the vocabulary of cultural relativists. For physics is a term signifying the study of the *world*, while science a term signifying a human and, indeed, a *social* activity.

really there. Read on and believe:

Galaxies are located at *fixed* positions in space. They might perform small dances about these positions in accordance with special relativity and local gravitational fields, but their real “motion” is in the literal expansion of the space between them. This is not the form of motion that any human being has ever *experienced*, in that it does not involve travel *through* space. So it is not surprising that our intuition reels at its implications and seeks less radical interpretations [Odenwald & Fienberg, 1993: pp. 31-35].⁸

And now, having run full circle, we are right back where we started. To the ducks and the rabbits. Only in this new Paradigm it is no longer ducks which look like rabbits nor rabbits which look like ducks. It is only Hans Christian Andersen’s *The King’s New Clothes*, wearing a mantle as invisible as Odenwald’s and Fienberg’s motionless motion. Unobservable in principle, yet seen none the less, clearly and perspicuously, with a touch of condescension for those of us, whose intuition reels at its implications, and sees nothing. It is difficult not to turn to a Kuhnian relativist, or worse, in the face of “observations” like *that*. It goes without saying, that the observation-interpretation, or active-passive, dichotomy breaks down in cases like the one in hand. What else could it do? The question is, who ever dreamed of saying otherwise *for* cases like the one in hand? And why on earth should they be deemed as the norm?

Andersen’s parable is highly instructive for our purposes. It takes a child’s intellect, fresh enough to be impervious, or indifferent, to social surroundings, to escape creative observing. The grown ups are the slaves of protocol, just as Odenwald and Fienberg are the slaves of their paradigm protocol. Which only goes to show that “active seeing” of the sort here criticized is the worst compulsion of all. Whence, besides, the necessity of investigating its “sociological causation”. For for beliefs like those, their sociological investigation can furnish the sole illumination of their undue persuasiveness. I’d take passive

knowledge any day, its limitations, narrowness and downright poverty notwithstanding. We’ll end up empty handed, people tell me, for holding the views I do. Perhaps they should ask themselves, what more they think they have in them right now.

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⁸Physicist L. Epstein puts the same question to two *other* physicists, Harrison, E. R. & Kaufmann, W. which only goes to show that this paradigm counts several faithful among its ranks: Asking them “how to do an experiment to *differentiate* between the two possibilities; Gaxies moving apart or the space between them expanding” he came to realize that “the question had not previously entered their minds” [Epstein, 1987: p. 70].