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ENDNOTES
I want to thank my commentators for their really wonderful papers -- for all the work they have done to take me to task, and of course for their spirited challenges and devastating criticisms .... and I wish I could have an hour at least for each of the three, to respond adequately.

Instead I need to be drastically selective. So I'll take on three topics: the logic of scientific revolutions, the empiricist critique of metaphysics, and finally, the question not just of what empiricism can be now but \textit{what metaphysics can be now}. For one of the most exciting things for me in this symposium is that there may really be something in metaphysics that an empiricist does not have to despise.

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1. McMullin on revolutions

Initial statement.

Let me first say quite explicitly that I regard the transitions displayed in scientific revolutions as rational. In fact, that is precisely why they present a challenge to contemporary epistemology: we must have a concept of epistemic rationality that allows for such changes in view and does not just end up classifying them as fortunate bits of irrationality.

So Ernan and I agree so far. Then the question is whether our epistemology needs amending. Well, that depends on what our epistemology is, where we start from -- and here we differ.

Ernan clearly sees me as admitting an element of irrationality, since I allow for free choice and the impetus of emotion in places where so-called rational deliberation falls short. I do not see it that way, and I will have a question for him at the end: namely whether it is really true that he recognizes tighter constraints of rationality than I do.

McMullin's challenges

As I was reading Ernan's paper, I noticed with some surprise that I had never really stopped to ask myself whether Galileo or any of Copernicus's contemporaries had suffered the sort of epistemic despair that I was describing.

Now this is telling, and I don't actually take this as a criticism! It had not seemed pertinent to my argument whether actual persons involved in these transitions had really been as painfully insightful as a Pascal or Kierkegard into their own true epistemic condition. I thought of the absurdity involved as deriving simply from the logical relationship between the old,
replaced theory and the new one that replaced it. It is not so surprising if the actors involved in the revolution lack a clear understanding of those logical relations.

In the salient cases that we discuss under this heading, that logical relationship is not simply one of mutual contradiction, for it is not simply a disagreement about the right predictions of observable phenomena. It extends rather to the conceptual framework in which both the observable and the unobservable are characterized, and the language in which each is described. The idea that simultaneity is not absolute, or that a body will keep moving if not acted upon, or that there can be instantaneous correlation of spatially separate events (as in Newton's law of gravitation) without prior synchronization -- all of these were absurd relative to the old, replaced theories. The absurdity was, it seems to me, a point of logic.

What then of the rather personal terms in which this conflict is dramatized, through imagined scientists to whom this situation is entirely transparent? That is a literary conceit, I admit; but I do not offer this simply for the sake of drama. Rather my concern is with today's efforts to construct a viable epistemology. Neither Bayesian conditionalization nor attempts to formulate a decision theory for opinion change had seemed adequate to include such transitions in what they allowed as rationally possible. Yet such transitions belong to our most valued scientific developments.

So I submit that we have here indeed a touchstone for epistemology, and that we must there accept the entry of impulses which have traditionally not been included in the epistemically relevant factors. That is the crucial point.

The role of these impulses is precisely the role that Sartre ascribed to emotion -- i.e. the role of changing the decision-situation itself on the subjective side. Hence the term "emotion" still seems apt to me, as long as we understand it to refer solely to that role (which only

sometimes characterizes, or is filled by, episodes of real human emotion).

Ernan says rightly that the judgement that maintaining the older paradigm is no longer worth the cost, given the advantages of its rival, can surely be a rational matter. And he asks "Why can a change of values, motivated in this way, only be understood 'under the heading of emotion'?"

Certainly it is a rational matter! But not one that fits the form of purely theoretical deliberation. To see the rival as having possible advantages already requires relinquishing one's conceptual immersion in the older paradigm. There is a clash between the side which says 'When
the going gets tough, the tough get going' and the side urging one to place faith in the alternative and jump ship. The change in values to be rationally assessed presupposes a move that cannot be warranted on the basis of the prior opinion plus values -- i.e. a preceding change in those very factors.

Mcmullin's own epistemology: retroduction

As far as I myself was concerned, this did not start from a philosophical tabula rasa of course, but from where I had gotten to already in *Laws and Symmetry*, with probabilism and the limits of subjective probability and decision theory.

Ernan is replying in effect that this does not at all present a difficult challenge to *his* epistemology. His characterization of the process of epistemic updating has room for all the moves that are required in such revolutions, and classifies them as rational. This may be perfectly compatible with the conclusion I come to, namely if the processes of rational change in view for him are ones that (a) fail to fit either Bayesian or epistemic decision theory forms, and both (b) involve free choices and (c) relevant factors on the side of actors' values and interests. Then the decisions involved in rational change of opinion over time are not purely theoretical.

In that case Ernan and I can make common cause against both the more simplistic forms of naturalism and Bayesianism in epistemology. But I submit that the relevant factors involved will include ones that fit Sartre's general account of emotion -- apart from the phenomenology of emotional experience, which is not at issue here.

My own question for Ernan

On your view, what is ruled out as epistemically irrational? Retroduction does not come with an rule in the sense of a recipe or algorithm; it leaves the actor quite a bit of leeway for choice.

In my view, there is just one definitive mark of the irrational, and that is to sabotage oneself, by one's own lights. I wonder if your view on this is perhaps neither less liberal nor more restrictive than mine. Let me explain why I suspect this.
As you have pointed out too, elsewhere, Galileo praised Copernicus for paying no heed to the contrary evidence -- for listening to "Reason" instead of his senses, Galileo says, for he endorsed what Copernicus did. Now, I take it that you see Copernicus as using retroduction. But I also take it that ignoring contrary evidence is not an essential feature of that practice! So how could you have convicted an opponent of Copernicus of violating retroduction?

So the question is then whether you have stricter criteria than mine. Is there some way to tell that someone should or must reach a certain conclusion by retroduction (such as to go with Copernicus at this crucial historical moment) and to tell him or her that to fail to do so is irrational? And are there non-trivial examples of such violations that would not count as irrational by my criterion?

2. Empiricism vs Metaphysics

All three of my colleagues here challenge me on the question whether empiricism can actually mount an effective or cogent -- let alone radical -- critique of metaphysics, given what I see as viable for empiricism today.

Initial statement.

In Ch. 2 I argued that the empiricist cannot launch a radical critique of metaphysics on the basis of a belief about what we and the world are like -- that would simply be to take a specific metaphysical position oneself. In fact, for empiricism to set itself against that sort of philosophical enterprise altogether it has to recast itself explicitly as the sort of philosophical position that does not consist in a dogma but in a stance.

What will the critique of metaphysics be like if launched from such a stance? That is the current challenge. As a preliminary I want to point to Chapter 1, which was in fact meant to provide in concrete example precisely how I thought an empiricist today could tackle the evil of metaphysics today. What is actual is possible, so if this was an actual empiricist critique of metaphysics then an empiricist critique is possible ....

Impossibility of a thesis driven critique

There is an impression, I think, that the empiricists of the modern era did have a effective basis for their critique, namely in their view of the possible sources of knowledge. That view could of course be criticized in turn, as it was; but at least it was a basis worth taking seriously.
I used to accept that, and thought that it could work, so I used to use the statement "Experience is our one and only source of information" as characterizing empiricism. That was some years ago, and I now see this impression itself as mistaken. That particular statement has much to be criticized, but I want to leave that aside here; the fact is that no statement at all can play the required role, nor ever could.

So I think my critics today are at least hankering for something impossible -- and I want to invoke "ought implies can" as my defence here.

Critique indeed value-driven, in part
Page 46 of *The Empirical Stance* has, as Paul and Anja have reminded me:
"There is now either no longer any bite to the critique, or else it bites its own tail"
That was about 'naive empiricism' -- a position that satisfies Principle Zero. The argument there was independent of any content which its dogma might have, and derived only from assumptions of what roles that dogma would be required to play. Now, even if you accept this conclusion -- as Anja does not -- there is obviously the further
" How does the move from doctrine to stance empiricism help with this problem?"
-- i.e. the empiricist's problem of mounting a critique of metaphysics.

But what is this problem? Traditionally conceived it requires precisely something that traditional empiricists also wanted to have, but which it is impossible to have: a refutation of metaphysical statements as either false or nonsensical. Any attempt at such a refutation will fail, precisely since it enters a game designed to give it no room.

There is no way out but to reject the game itself.
*As I understand it, rejection of the game of metaphysics is part of what it is to be an empiricist. And the basis can only be: it is not worth it, to play a game of that sort.*

This is a value judgement. It is a value judgement, but as I shall argue further below, that does not by any means preempt a rational and effective dialogue between empiricists and analytic
metaphysicians. There is an implicit appeal to shared prior value judgements in such a question as "Do you think there is some worth to a life spent in playing games of that sort?" The question reveals one's own value judgment, but invites a search for a common basis in admiration and contempt.

**How can a stance provide an effective critique?**

This brings us to Anja's and Anjan's biggest challenge: how does this count as a philosophical critique? And how could it possibly be telling, or allow for any possibility of resolution?

**Jauernig: the values involved**

I will begin with Anja's arguments which focus on the value judgements involved in a stance. As I said above, *The Empirical Stance* starts not with Ch 2 but Ch 1, which should function as my sustained example of an empiricist critique of metaphysics that I can present, from a contemporary empiricist point of view. The critique involves many challenges, inspired by contrary views of an empiricist type, yet I think telling for today's analytic metaphysicians, by their own standards. I will list some below.

In retrospect that critique does include an expression of values, we can see that looking back. But first of all, I am proud of my empiricist values, and secondly, as my argument above shows, the involvement of value judgements is inevitable if there is to be a critique at all.

Now there is another implicit sanction in the games all philosophers play: that any argument (in the broad sense of considerations brought to bear, not just factual reasoning) can be countered by pointing to possible positions against which it cannot work. (In the case of metaphysics, it seems always possible to point to a position within metaphysics that one can retreat to oneself and against which the argument does not work; that is why it is so frustrating.) And for any value judgement we can imagine someone who does not share it.

But that sanction, if universalized, reduces all of philosophy to just the sort of game in which there is no losing, that analytic metaphysics already is. To respect that sanction is to dismiss one's own value judgements as having to be bracketed in any philosophical dialogue.

I submit that the constraint to this sort of methodological relativism with respect to values is *itself a value judgement*, about what it is worthwhile to do in the dialogue that constitutes...
(Western) philosophy, and I reject that contention.

What lies at the basis of that sanction? The fear, I think, that the moment we admit that other values besides are own are possible, we are already in effect giving up our own values. **But that fear is based on a mistake, surely?** To take a stance is not to deny the possibility of other values and beliefs, but to stand firmly by one's own.

Anja expresses the problem very graphically when she says that the empiricist stance, when it comes to basing its critique of metaphysics, has finally nothing to offer but "I don't like metaphysics". That would be accurate if it was not a matter of today's empiricist criticizing today's analytic metaphysics, at the current stage of Western philosophy, but an Ur-empiricist speaking to an Ur-metaphysician before the start of human history. As it is, both sides can pride themselves on the insights we have gained since then, which we share, and which make it possible for us to confront each other with challenges that each has to take seriously.

**Analogy to a moral stance**

As analogy, let us take a stand against slavery. That stand certainly involves some value judgements as well as a cluster of factual beliefs. So disagreement would always be possible, by someone who does not share all the values involved. So Anja would ask "Does it all just come down to 'I don't like slavery'?"

Now the Romans and Greeks had no problem with slavery, though it became an issue in the New Testament because so many of the early Christians were slaves. What has happened since then? We have slowly and painfully gained moral insight that the Romans and Greeks lacked.

Now Anja will ask here: but what is the difference in this history between insight and error? If I say that we now have moral insights that the Romans did not yet have, I point to an actual historical change, but add endorsement through the term "insight" -- thus expressing a value judgement of my own.

True! But there is once again a logical point here, that nothing could circumvent. I cannot say that my opponent and I share certain insights without expressing a value judgement -- but if I cannot say that then I cannot report what has really happened, according to me. And I insist that I have some knowledge of what has happened.
How does this apply to philosophical argument?

Anja cites some of my critique of analytic metaphysics to suggest that I see no objective right or wrong in value judgements, but only personal preference. A careful reading will reveal no such implication, it seems to me. In fact, that is not my view. What I object to only is the idea that objectifying values or basing them in factual beliefs -- as opposed to an understanding of the importance of what matters to us (to quote someone we know) -- could make them secure or provide a substantive basis for them.

So how does the above analogy apply to analytic metaphysics? I am certain that I have a huge shared basis of value judgments with my actual colleagues engaged in analytic metaphysics.

The responsibility
  a) to secure informative content for one's statements, and not just perfect grammatical and logical form,
  b) to own up to purely subjective probabilities and preferences if or where they play a role in actual theory choice,
  c) to display assumptions within one's view of science when framing a philosophical position, and
  d) to have one's stated goals in harmony with one's methods, at least relative to one's own beliefs
-- all of this is accepted by the analytic metaphysicians that I criticize there.

That we have this responsibility, and accept it as participants in this particular philosophical way of life, is not a simple factual statement. But that is just the point: if it was, it wouldn't help. If it was just another factual assertion to be believed or disbelieved, there would not be any basis for my critique; but there is.

Chakravartty: The problem from the side of epistemology

Anjan on the other hand addresses the same point by looking into what remains as
possible for a new empiricism in epistemology.

The three levels

Let me begin by reminding you of the very nice way he has of laying out the epistemic situation, as seen if one accepts the analysis in *The Empirical Stance*.

There are three levels he says. I take it that he is describing the epistemic state of an imagined person -- call her Alice -- with the limitations on that person's insight, intelligence, and memory neglected -- as I do in this context. The first level has the family of factual propositions that are possible objects of belief or opinion. I take it that we can think of this family as delimited by a language, Alice's 'basic' language for factual description.

The second level is that of epistemic policies. Anjan gives as example the idea that one should deem explanatory virtue an important desideratum in determining what to believe, or that the methods of the sciences should be privileged over others. These are policies regarding the generation of factual beliefs, and not themselves objects of belief: they are adopted or rejected -- either is a commitment to proceeding in a certain way. As he points out, the commitment to a policy has accompanying opinions that come logically in train -- specifically you can't rationally adopt a policy while asserting that it is much less likely to be vindicated than an available rival.

So when it comes to having opinions and policies, there are criteria of coherence for their combination as well as for them separately.

But finally, there is a third level, which is perhaps noticed only by philosophers. A choice between epistemic policies will not be at random, nor can it be compelled on purely logical grounds. So how to choose? Or rather, what sort of context is presupposed for rational choice among epistemic policies?

Challenges on the third level

Couldn't one just say: choose the epistemic policy which, according to your prior opinion, has the best chance of being vindicated? That would be good advice, except for two things:

a) it simply eliminates repudiation of some prior opinion, and

b) when prior opinion is to be retained, amounts only to "be rational".
Hence this answer is no help at all.

So it appears that on this third level we encounter stances once more, and these are not epistemic stances but stances in epistemology -- the cores of certain rival philosophical positions. They will, as stances do, consist in a combination of attitudes, some of them factual beliefs and some of them value judgments, some perhaps also intentions, goals, commitments, .... But we certainly see at this level a rivalry of alternative stances. Much of the controversy between empiricist and metaphysicians lies precisely on this level.

And this is where Anjan then raises the question about stance relativism. (Even if there were a fourth level to go to, that same question would not disappear, of course, but only be pushed back a step.)

Rationally viewing rival stances

What attitude should the occupant of one stance take with respect to rival stances, on this level? Our previous ideal person Alice may be assumed to have one of these stances so let us continue with her as example.

As I see it, step one for Alice is to acknowledge the initial or logical viability of such rival stances, and step two is to criticize them on the basis of elements of her own stance. This critique, if carried out well, will be telling for those rivals who share those particular elements, of whatever sort they may be. Other rivals who do not share them must wait to be addressed differently. Logically speaking there is no end to this, but there is no point in speaking in a historical vacuum. Within our historical dialogue not all logically possible rivals are there to be confronted, nor do such historically conditioned beings as we are have access to possibilities beyond our historical horizon.

The most important point here is that acknowledging the values of others does not imply or bring in trail relinquishing one's own. Alice is proud of her values, and has the right to be -- she in turn submits to relevant critique only on the same terms.

If this is relativism, it is certainly not debilitating relativism -- it is only an acknowledgement of the logic of this aspect of the human condition.
3. Metaphysics revisited (What can metaphysics be now?)

Initial statement

I know very well that in its 2500 years history Western metaphysics has taken many forms -- the question of how to characterize it as an intellectual tradition, and the further question of what it can be now are as difficult and complex as the similar questions I raised for empiricism.

Although I generally use the term "metaphysics" by itself to name the target of empiricist critique, I have tried at times to acknowledge that diversity and to specify the target more selectively. For example I've said that I am really only against pre-Kantian metaphysics, and then only if practiced after Kant -- though I certainly take that to include the large swath of analytic metaphysics of the past half century.

But both Ernan and Anja have now, in different ways, pointed to things that come under the heading of metaphysics and may be either attractive or unavoidable for this empiricist, at least.

McMullin: encounter / persons

Trying so hard to be an empiricist, do I not engage in metaphysics as well, after all?

I take this to be the main challenge in the latter part of Ernan's paper, where it touches on religion and more specifically on the concept of encounter. He is referring specifically to what I say about encounter with the divine, but there is a lot to it apart from that. To what extent can this concept, or the concept of a person, be naturalized, and to what extent can our knowledge of each other be gained through objectifying inquiry?

Let me just say briefly that I see the problems pertaining to encounter as of no less difficulty when the persons involved are you and me. When two people encounter each other two entire worlds meet, yet do so within the nature of which we are part; encounter with the divine is no different in that respect, and the mystery is of the same order. To say that is not to answer Ernan's challenge, I realize that, but I can just now only point to the larger context in which I would have to approach that challenge.

I have in fact tried to make a beginning on the background for that challenge -- which I'm not in a position to answer now -- and would like to refer you to another paper, somewhat grandiloquently called "Transcendence of the Ego: The Non-Existent Knight".

Jauernig on what metaphysics can be

Another true surprise I had came when reading the last part of Anja's paper. She is proposing a view of metaphysics, or rather a way of engaging in metaphysics, that is surely also a radical departure from the tradition:

In fact, if the aim determines what counts as success, we might view the fact that the success of metaphysics is evaluated in terms of personal values and subjective probabilities as evidence that the aim of metaphysics is indeed not to provide us with true, but rather with explanatorily satisfactory theories. But if this is the right way to think about metaphysics the charge of self-sabotage no longer applies, for the metaphysical enterprise would then be ratifiable in terms of the values and probabilities of its possible gains.

A similar suggestion was made by Alicia Finch in her review of the book. But Anja gives it a particular shape that carries an argument in its very name. The sort of enterprise she envisages she calls "constructive metaphysics" and she writes:

The constructive metaphysician allows himself to engage in speculations that go beyond possible experience by completing the scientific answer to the question “how could the world possibly be the way our experience presents it to be?” All of these answers and questions seem to me to address the task we posed for philosophy, namely to make the world and ourselves intelligible to ourselves in an explicit and self-reflective way, even though none of these answers are presented as ‘the truth’.

So the goal here is to satisfy more or less what William James called the Sentiment of Rationality, and then the question is of course precisely what is at stake.

What is the gain?

But, van Fraassen might ask, is there anything at stake, and what could possibly be the gain of such metaphysical speculations? The answer to these questions will be an expressions of values and attitudes, which might not appeal to everybody. Here is a possible answer: what is at stake is our peace of mind – at least Spinoza would agree with
me here –, and what we gain is satisfaction of our natural strive for a complete description of how things might be, which is integral to a real understanding of the world and the human condition.

I can think of this in two ways, both simpatico. Both are indicated by Anja herself.

- The first is that if Kant's transcendental deduction cannot lead to a uniquely presupposed structure required for the coherence of the deliverances of experiences, it can lead to a manifold of alternative structures that would each 'connect the dots' so as to provide, one might say, narrative structure.

- Secondly, understanding what these alternatives are could be allowed the same significance as I attach to the variety of interpretations of physics. Seeing how yet another one may be tenable, or must after all be rejected, is precisely what increases our understanding of that theory. The pursuit is not truth, but understanding ... in fact, the proper goal of philosophy.

**What are the values pursued?**

But I certainly want to demur in some ways too. I'd like to insist that the minimalist option may be the best in such completions: what you see is what you get, what is real is what is here -- not what various explanatory ideals would require by way of filling out. Thus in the example I gave of Descartes' *The World* the criteria to be satisfied are clearly those of the then dominant mechanical philosophy, which were soon thereafter seen as too constricting.

The values mentioned include not only the intellectual satisfaction of seeing that there is an explanation, but also the sense of being at home in the world that this could furnish. I would also have to emphasize that the satisfaction of having an explanation is strongly conditioned by standards and criteria one would bring to it, and that these are very much historically conditioned. As a caution to all philosophers everywhere I mention an article by a psychologist friend of mine, Alison Gopnik's "Explanation as orgasm".

**Consequent change in philosophical practice?**

I fully accept the value and legitimacy of a historically conditioned effort; in fact, it seems to me that there lie our only viable options. So to point this out is not a criticism of what
they propose. But what could it mean to those engaged in metaphysics today? It seems to me that it would direct them to pay attention to something that goes well beyond theoretical puzzle solving. For if the values mentioned above are really to be pursued then they have to influence the process of theory choice in metaphysics, and for that they have to be saliently considered.

Specifically, it seems to me, to practice metaphysics in this way would make no sense unless the points I raised in Chapter 1 were met. It would make no sense to play verbal games like the removal of context dependence from a word or phrase so as to turn it surreptitiously into a technical term. Nor to concentrate of grammatical and logical correctness while just assuming that the assertions have real content. And so forth. The conscious and explicit pursuit of such values as intellectual satisfaction and emotional peace would alter what would be acceptable solutions to the internal problems.

So it seems to me that acceptance of these new suggestions in our philosophical community, if implemented, would tend to change the enterprise of metaphysics as drastically as anything I could propose.

An enterprise defined by its telos

What can we legitimately call "metaphysics"? The way I think of human enterprises or activities is as defined by their telos, their end-in-view. By that token, it seems to me that strictly speaking we cannot give the same name to what Anja describes here and something that traditionally purported to reach for the truth about how things are. But on the other hand, the word "metaphysics" already covers a variety of different activities, and I have found no proper label to single out what I attack there from what I appreciate. So I wish we could have a better nomenclature, but for now I'll just say: I have no quarrel with what Anja proposes here, and provided it is practiced without false consciousness, I truly see the value in it.

REFERENCES

Chakravartty, Anjan "Stance Relativism", this Symposium.
Gopnik, Alison "Explanation as orgasm", Minds and Machines, 8 (1998), 101-118.
Høeg, Peter The Woman and the Ape.
Jauernig, Anja "Can a Philosophical Position Consist in a Stance?", this Symposium.
McMullin, Ernan "Taking An Empirical Stance", this Symposium.
Teller, Paul "What is a Stance?" Philosophical Studies (forthcoming).
van Fraassen, Bas C. (articles available at http://www.princeton.edu/~fraassen/abstract/)
"Against naturalized empiricism"

The Empirical Stance
"The False Hopes of Traditional Epistemology"
"From Vicious Circle to Infinite Regress, and Back Again"
"Transcendence of the Ego: The Non-Existent Knight"

Wheeler, John "Assessment of Everett's 'Relative State' Formulation of Quantum Theory", 
Reviews Of Modern Physics 29 (1957), 463-465.

ENDNOTES


[2] The father in Kafka's Metamorphosis is still for me the paradigmatic example on the non-theoretical side. Looking at it from the outside, or even just in retrospect, how can we deny that his ultimate decision is rational, and to be rationally endorsed? Yet within his own situation there is no pathway from "This is my son, who is ill" to "this is not my son, not a person, but a cancer to be excised." He could only get there through the sister's despair and his own anger at the destruction of his family.
[3] See further my "The False Hopes of Traditional Epistemology"

[4] (modulo differences on very specific details in the neighborhood of inference to the best explanation)

[5] This takes seriously that what is at issue is a combination of beliefs, opinions, intentions, goals, values, commitments and so forth, and requires internal coherence for this combination. Contrary to what Anja insinuates, that does not amount to merely or purely logical consistency, but includes broadly pragmatic considerations as well. Nevertheless, it is very liberal.

[6] See my "Against naturalized empiricism", whose argument did not go into The Empirical Stance, and so was non-culpably left out of account by my critics today :-) I think it goes a considerable way specifically to answering some of Anja's arguments about experience.

[7] Point urged by Paul Teller; see also our symposium in Philosophical Studies (forthcoming).

[8] You can probably see how this response goes with: it is not metaphysical statements that have to be identified and countered, but the game of metaphysics; we can do nothing here on the level of semantics,
but only pragmatics.

[9]
Anja Jauernig, "Can a Philosophical Position Consist in a Stance?", and Anjan Chakravartty, "Stance Relativism", this Symposium.

[10]
The metaphysical instinct will automatically translate this into "what is the truth maker, what is the ground?". That is as mistaken a question for values as for factual statements.

[11]
The relevant pages are probably 15-17.

[12]
Such a view even seems incoherent to me: how could I coherently express my empiricist or any other values and simultaneously say that all value judgments are a matter of mere personal preference? "Torture is wrong, but that is merely my personal preference" -- such a conjunction undermines itself completely, much as Moore's paradox does.

[13]
If "There ought to be no torture" is taken as a factual statement, it has the status of "There is a norm or value that rules out torture", and this could always be met with "How interesting! But so what?". It is important though not to confuse this rejection of objectification as warrant with the sort of debilitating relativism that Anja targets. See further section 4. "Spectre III: loss of value" in my "From Vicious Circle to Infinite Regress, and Back Again", which is precisely on this topic, but much too long to repeat here.

[14]
Even though I remember Patrick Maher saying to me at a PSA symposium, in connection with the Reflection Principle, "maybe integrity matters less to me than it does to you".

[15]
The word 'stance' is in danger of sliding into debilitating vagueness, so I won't call these stances -- even though I recognize that one can quite aptly say something like "her stance on questions of evidence and theory choice consists in the following epistemic policy".

[16]
I take it that criteria of vindication take cost into account -- an almost impossible policy to follow might be rejected despite its superiority on other counts.

[17]
by my 'no self-sabotage' criterion

[18]
I think that Anja would demur here, not allow this assumption, and ask instead "But how is she to choose?" That is an unanswerable question if Alice exists before the start of human history -- or if she is in the despairing position of someone lacking trust in herself to the extent of Descartes fiction of the total skeptic. But only if.

[19]
I would exclude for example the effort to construct a phenomenological ontology by Heidegger and Sartre -- whatever critique we might want to offer there, it could not possibly be along the same lines.
Forthcoming in *Ratio*; pre-print available on my website. The title refers to a novel by Italo Calvino. For the crucial notion of encounter (not broached in that paper) I would also like to refer to a novel, namely to Peter Høeg's *The Woman and the Ape*.

"I would be remiss if I did not pause here to point out that van Fraassen's harsh treatment of the ontologist is not entirely deserved. In particular, it is not the case that whenever the ontologist makes an inference to the best explanation, truth and falsity are the only values that are at stake. Other values come to light when we consider that at its best, analytic ontology draws out the implications of a metaphysical theory until it reveals an implication that is of crucial significance to the way we live our lives. In these cases, what is at stake is our conception of who we are and how we ought to live; and we bet on one theory rather than another because it is the theory that best allows us to cling to that conception." (Alica Finch, Review, page 303; readable on internet at http://www.princeton.edu/~fraassen/FinchReviewES.pdf)

* Minds and Machines, 8, 101-118 *

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I add a quotation from John Wheeler (commentary on Everett's original paper):

"Instead of founding quantum mechanics upon classical physics, the "relative state" formulation uses a completely different kind of model for physics. This new model has a character all of its own; is conceptually self-contained; defines its own possibilities for interpretation; and does not require for its formulation any reference to classical concepts. It is difficult to make clear how decisively the "relative state" formulation drops classical concepts. One's initial unhappiness at this step can be matched but few times in history' when Newton described gravity by anything so preposterous as action at a distance; when Maxwell described anything as natural as action at a distance in terms as unnatural as field theory; when Einstein denied a privileged character to any coordinate system, and the whole foundations of physical measurement at first sight seemed to collapse. How can one consider seriously a model for nature that follows neither the Newtonian scheme, in which coordinates are functions of time, nor the "external observation" description, where probabilities are ascribed to the possible outcomes of a measurement?"

Let me emphasize again that I took up the topic of scientific revolutions as a challenge to epistemology -- or more precisely, to certain approaches salient in contemporary epistemology, and therefore as pointing to what needs to be changed there if a viable empiricism is to accept them. As seen in those approaches, the task for the epistemologist is to represent, present a model of, the form opinion can take, the forms its revision can take in response to various forms of 'input', and criteria for the evaluation of both, as reasonable, accurate, vindicated, calibrated, and most of all, rational. The challenge I offer is that to be acceptable, such an epistemology must allow as rational the sort of transition seen in radical changes in the sciences, even under conditions of perfect insight --to the extent possible at the time -- into the content of the theories and evidence available.
This point would be the basis of my reply to Anja on naive empiricism, if I had had the time to cover that part. Naive empiricism is identified as a position that is no exception to Principle Zero, yet has the three characteristics (labeled a, b, c) that I submit as hallmarks of an empiricist position. That entails that naive empiricism consists entirely in belief in a certain factual statement (the dogma), and thus also that belief in this statement can play the roles required to give that position those characteristics. My argument is then that there cannot be such a position. The alternatives Anja describes may indeed be attractive to some would-be empiricists, but I do not see them as falling under this identification of naive empiricism. For example, if a commitment to be and remain in accordance with requirement (c) is part of the position then it already does not satisfy Principle Zero.

As example take Nelson Goodman's argument against the reality of sets. It assumes that "there are sets" is a factual statement. To conclude its negation will therefore require a factual premise -- Goodman offers: distinct entities have distinct ultimate parts. His opponent simply denies that premise, which is possible since there is no test on which both agree, no experiment or observation that would be telling for both of them, as a neutral arbiter. In addition, his opponent points out that a statement contrary to a metaphysical statement is also a metaphysical statement, so Goodman is just taking another metaphysical position.

Goodman can try next to display internal tensions and even contradictions in the platonist position, or weaknesses by the platonist's own lights. That is a great help for the platonist, who can then make internal improvements to his position. For the game is designed to have no losing: I'll adapt here an unnamed friend's adage that the metaphysician is like a betrayed lover, overtly totally uncompromising but in fact ready to retreat and accept just anything at all, endlessly. (Logic is accepted as arbiter of course, but logic is empty: its bounds are to form only, and challenge ingenuity but nothing else).