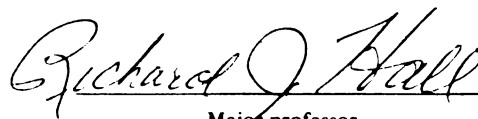




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THE CONCEPT OF A METAJUSTIFICATION
IN THE EPISTEMOLOGY OF LAURENCE BONJOUR

By

Jordan J. Lindberg

A THESIS

Submitted to
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ABSTRACT

THE CONCEPT OF A METAJUSTIFICATION IN THE EPISTEMOLOGY OF LAURENCE BONJOUR

By

Jordan J. Lindberg

Laurence BonJour, in *The Structure of Empirical Knowledge*, adopts a coherence theory of justification and a correspondence theory of truth. Thus he must confront the pressing problem of joining these two theses together. He attempts to show that it is epistemically responsible to hold that a coherent set of empirical beliefs, which satisfy a stringent observation requirement, is adequate evidence that the empirical beliefs represent the very structure of the real world. The *metajustification* is the reason why an agent ought to accept that coherence, in the long run, is a reliable guide to having true beliefs about the world.

I argue that the metajustification that BonJour offers is inadequate. Four significant criticisms are developed: (1) that traditional skeptical arguments can defeat the thesis, (2) that problems in justifying *a priori* induction pose a threat to BonJour's theory, (3) that his concept of a "belief" is mistaken, and (4) that Quinean and Kuhnian criticisms will defeat the metajustification.

To
Marcia Kay,
my sweet baboo

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Section I: Introduction

Laurence Bonjour, in The Structure of Empirical Knowledge, adopts a coherence theory of justification and a correspondence theory of truth; thus he must confront the pressing problem of joining these two theses together. The project is an interesting one for several reasons.

First, this is a somewhat radical approach, given the history of epistemology. Although many have worked with either the coherence theory of justification or the correspondence theory of truth, few have attempted to fuse the two together. Notable exceptions might be Everett Hall's Our Knowledge of Fact and Value (1961), and the writings of Wilfrid Sellars. In this regard, Bonjour's project is perhaps an ambitious one.

It is also worth noting that Keith Lehrer's early epistemology shares many affinities with Bonjour. In the first edition of his book, Knowledge, he provides an explanatory coherence theory linked to a foundationalist view of basic sensory evidence (reminiscent of the logical positivists). Unlike Bonjour, though, he ultimately defends

a coherence theory of truth.¹ BonJour is the first to offer a detailed defence of justification-as-coherence and truth-as-correspondence, together in one package.

Second, in order to make out an epistemology that is not either viciously circular or regressive, BonJour introduces the notion of an *a priori metajustification* which serves as the link between first-order justification and truth: It is the reason why a cognitive agent should accept the coherence of his or her own beliefs as evidence of their truth.² It is this metajustification which makes BonJour's epistemology both interesting and problematic, and it is just that element on which I will focus in this essay.

Now one might argue that this presentation conflates two distinct questions: "What reason does a particular cognitive agent have for thinking that her justified beliefs are likely to be true?" and "What reason do we have (as epistemologists) for thinking that beliefs justified by coherence are likely to be true?" Perhaps my presentation is, indeed, conflated in

¹ This is no longer true of Lehrer. His new book, Theory of Knowledge, rejects explanatory coherence and adopts a correspondence theory of truth.

² By "cognitive agent" or "cognitive knower" I mean any form of intelligent (or sentient) life capable of both representing and misrepresenting states of affairs. My goal is not to open a metaphysical "can of worms" regarding what constitutes agency, life, etc. Rather my goal is to rule out, as far as this epistemological critique goes, things like thermostats and gas gages. One problem with such a loose definition is that it is not clear that thermostats, for example, can ever be held epistemically accountable for misrepresentation.

just such a way. Nevertheless, Bonjour is convinced that the demands of epistemic responsibility will make any and all responsible cognitive agents (regardless of chosen profession) into epistemologists, at least as far as needing a metajustification goes. I completely agree if this seems counterintuitive (and perhaps just plain false), but I am also convinced that there is strong evidence that this is how Bonjour sees things. I will present the arguments for Bonjour's categorical insistence on epistemic responsibility shortly. Suffice it to say, for now, it is the primary reason for Bonjour's rejection of externalism.

A natural first question to ask would be why Bonjour is committed to having both a coherence theory of justification and a correspondence theory of truth. In order to answer this we have to look at some of the meta-epistemic commitments that Bonjour develops throughout his book. Specifically, we need to turn to three elements: Bonjour's insistence on meeting the "cognitive goal of truth", his commitment to internalism, and his views on the relationship between first-order justification of empirical beliefs and the second-order problem of metajustification.

Bonjour writes that "The distinguishing characteristic of epistemic justification is...its essential or internal relation to the cognitive goal of truth. It follows that one is epistemically justified only if and to the extent that all of one's epistemic inquiries are aimed at this goal, which

means very roughly that one accepts all and only those beliefs which one has good reason to think are true." (BonJour, p.8)

I have found that this quotation illuminates a wide range of BonJour's views. Note specifically his insistence that epistemic justification and truth are related "essentially or internally", that the concept of epistemic justification is teleological (or at least parasitic on truth), that truth itself is the "defining goal" of cognitive inquiry.

For BonJour, *the cognitive goal of truth is the central critical component of epistemic justification*. It is an indispensable and necessary condition for knowledge. But it is important to emphasize that without a fully developed theory of truth, BonJour is not yet committed to much: a pragmatist could argue that truth is a goal of justification, but then collapse the notion of truth and justification together. Arguably, such an epistemologist could still fulfill the condition that truth be the defining goal of cognitive inquiry. But we will see soon how BonJour's other commitments will prevent such a pragmatic view from developing. For now, let us turn to the insistence on internalism.

The internalism/externalism debate is really not a new one but it has taken a more and more central place in epistemology in recent years. I think it is important to characterize the distinction in a clear way. The debate hinges on whether or not any adequate epistemic account ought

to require that the putative knower be able to validate or confirm, either in practice (or, for some philosophers, in principle) when he or she actually is justified in believing some given proposition (or, to over simplify, to require that a person must *know when he or she knows*), for any claim to adequate justification.

Alvin Goldman has recently argued that "Theories that invoke solely psychological conditions of the cognizer are naturally called 'subjective', or 'internalist', theories". Theories that involve such matters as the actual truth or falsity of relevant propositions are naturally called "externalist" theories (assuming, at any rate, some realist approach to truth). (Goldman, 1986, p.24) The distinction is wholly epistemological.

As we will see later, although Goldman's characterization works alright on the epistemological side, BonJour is maintaining both a realist conception of truth and also arguing that justification must be solely based on the psychological (or internal) conditions of the cognitive knower. This is what forces the need for a metajustification.

An internalist (like BonJour) holds that a necessary condition for knowledge is, roughly, that the psychological or internal conditions that regulate (or ought to regulate) the state of an agent's observational beliefs be accessible to the knower at the time of the input. The subject must be able to judge for herself when an empirical belief is justified and be

able to discriminate justified from non-justified beliefs. That is, an internalist must be able to personally tell when his or her observational beliefs (inputs) yield or constitute empirically justified claims to knowledge, and when they do not. The internalist sees epistemology in a *regulative* role: The purpose of epistemology is to provide the cognitive knower with an adequate account of the conditions which they must meet in order to make justified knowledge claims.

What is the relationship between internalism and the cognitive goal of truth for BonJour? Remember that BonJour sees the relationship between truth and justification as an internal one. The cognitive agent must be able to personally tell which of his or her beliefs are justified and which are unjustified. And the only real criterion of good justification, for BonJour, is whether or not a belief is likely to be true. Again, without a fuller analysis of what it means to say that a belief is true, this condition could apply to a variety of possible epistemological systems. But the important point is that BonJour has at least ruled out the external ones. Any internalist thinks that it is necessary that the subject herself be able to personally provide the justifications for her empirical beliefs (when pressed). BonJour, though, also thinks that these justifications will only be adequate inasmuch as they guarantee the truth of those empirical beliefs in question. Truth is the essential defining goal of cognitive inquiry.

An agent is only a responsible knower when she can make the connection between having a justification for the belief that P and knowing that that particular kind of justification guarantees that P is true. This is ultimately the job of the metajustification. Therefore, the metajustification is subject to the condition of internalism as well.

What about the relationship between justification and metajustification? First, as I argued both are subject to the condition of internalism -- both have to be accessible to the cognitive knower. Metajustification is an internal matter because it is not enough that an agent be simply able to provide such-and-such a justification for believing that P, she must also be able to provide a metajustification that beliefs justified in such-and-such a way are at least likely to be true.

This is why, secondly, both are teleological. Bonjour's first project is to establish a connection between mere belief and a form of first-order justification. His second project, developing the metajustification, is aimed towards providing the agent with the link between first-order justification and truth.

The most important relationship, though, is the fact that the metajustification is designed to provide the cognitive knower with an *a priori* reason for accepting that the coherence (justification) of his or her first-order beliefs is an accurate and reliable guide to truth. Without the

metajustification, an internalist (or an externalist, for that matter) would have no good reason for believing that a coherent set of beliefs is probably a true set of beliefs without shifting either to a coherence or to a pragmatic theory of truth.

BonJour is unwilling to make such a profound shift. He defends a correspondence theory of truth because of his commitment to metaphysical realism. He argues, briefly, that metaphysical realism is "unavoidably true (so long as anything exists at all)". (BonJour, p.161) Although I will not evaluate this argument in more detail, it will suffice to say that BonJour is unwilling to collapse truth and justification and, hence, BonJour needs a metajustification if he is to remain an internalist.

Because we will be critiquing the metajustificatory argument in great detail, it would be wise to present the elements of the metajustification and the rationale for including each of them. The three main elements are the Doxastic Presumption, the Observation Requirement, and the requirement that the metajustification be entirely *a priori*. I will now address each of these in turn.

A prerequisite to developing a metajustification is requiring that a cognitive knower have an "adequate grasp of" his or her set of first-order empirical beliefs. What the metajustification requires, in effect, is both that the agent have a reasonably coherent set of empirical beliefs and that

the agent be actually self-aware of his or her first-order beliefs, even if the degree of coherence of those first-order beliefs is very small. For Bonjour, the Doxastic Presumption functions as a guarantee that the cognitive knower have access to the set of beliefs that he or she holds.

At no point does Bonjour clearly and simply state what the Doxastic Presumption is or even provide some details regarding how it functions. He does not even offer a concrete example of the Doxastic Presumption at work. However, from his comments and from the contextual evidence, I think that it is fair to say that the Doxastic Presumption is just this: Simply asking the question of whether or not one's system of empirical beliefs is in fact justified, presupposes that approximately such a system of beliefs exists to be questioned in the first place. To oversimplify a little, the Doxastic Presumption is that our beliefs about what beliefs we have are, overall, approximately correct. Bonjour thinks that the Doxastic Presumption is necessary because it is the prerequisite for being able to justifiably assess the degree of coherence of one's own set of empirical beliefs.

Bonjour writes that, "According to a coherence theory of empirical justification, as so far characterized, the epistemic justification of an empirical belief derives entirely from its coherence with the believer's overall system of empirical beliefs and not at all from any sort of factor outside the system. What we must now ask is whether and how

the fact that a belief coheres in this way is cognitively accessible to the believer himself, so that it can give *him* [or her] a reason for accepting the belief." (BonJour, p. 101)

It is critical for BonJour that the cognitive agent herself have access to her belief system and be aware to some unspecified extent that the system of beliefs is, in fact, coherent. She must believe that her system of beliefs is coherent, and herein lies the problem. Is not the agent's metabelief that her system of beliefs is coherent, itself in need of some kind of justification? Would not that justification then need justification itself and, in this way, lead to a vicious infinite regress?

BonJour writes that the "suggested solution to the problem raised in this section is that the grasp of my system of beliefs which is required if I am to have cognitive access to the fact of coherence is dependent, in a sense yet to be adequately clarified, on this *Doxastic Presumption*, as I will call it rather than requiring further justification." (BonJour, p. 103)

It seems that the *Doxastic Presumption* has two features. First, the *Doxastic Presumption* is "only that my representation of my overall system of beliefs is *approximately correct*." (BonJour, p.141) For the moment we need to separate the question of whether I have some particular beliefs, say, X,Y, and Z, from the question of

whether or not they are coherent with the rest of the system of beliefs that I hold.

BonJour argues that it is possible to ask whether I, as a cognitive agent, have a particular belief or a small set of beliefs. It is only then possible to "...appeal to the coherence or lack of coherence between the metabelief that I have the specific belief(s) in question and the rest of the system as I represent it - the existence of the rest of the system, but not of those particular beliefs being presupposed." (BonJour, p.104) In this way, small parts of the larger system of beliefs can then be brought into question and resolved by appeal to the larger system of beliefs (which then serves as a background to judge against). This will also serve an important role in his "doxastic voluntarism" model of epistemic responsibility, as we will see in the section on criticisms.

Coherence, of course, is a relative concept which can be measured in degrees and requires (like figuring distances in non-absolute space) both a concept to be checked and a system to be checked against. BonJour's real point is simply that it is not possible to call into question whether or not a subject's larger system of beliefs is mistaken and then settle the issue by appeal to coherence. This kind of appeal is question-begging.

Second, BonJour argues that the Doxastic Presumption does not function like a premise. He says that "[the Doxastic

Presumption] is, from the standpoint of a coherence theory, a basic and unavoidable feature of cognitive practice. Epistemic reflection begins from a (perhaps tacit) representation of myself as having (approximately) such and such a specific system of beliefs: Only relative to such a representation can questions be meaningfully raised and answered." (BonJour, p. 104) So the Doxastic Presumption does not function like an ordinary premise, it is more like a consequence of his own theory -- perhaps even a condition of his theory. The Doxastic Presumption "describes and formulates, from the outside, something that I unavoidably do: I assume that the beliefs constituting my overall grasp of my system are, by and large, correct." (BonJour, p. 105)

One might object at this point and claim that BonJour is skirting the issue by appeal to some kind of cognitive psychology of the individual. BonJour would argue that without the Doxastic Presumption, the metabeliefs cannot themselves be justified and, hence, neither can first-order justifications. It is a descriptive and not a normative claim about the way that persons justify beliefs about beliefs. A better objection might be to argue that the Doxastic Presumption violates a condition of internalism. An internalist, as we have seen, sees epistemology as a highly normative project. The Doxastic Presumption is a descriptive justification (or vindication) of a fact of cognitive practice. It has not yet been shown that such a practice is

reliable in just the sorts of ways Bonjour demands of justificational coherence. If Bonjour is to be consistent (particularly a consistent internalist), then it seems that he must still provide some normative reason for accepting that the grasp of one's own beliefs (and one's assessment of its coherence) is an accurate one. He addresses this in the last point.

BonJour raises the question of whether or not the Doxastic Presumption actually begs the question against a skepticism that my representation of my own system of beliefs is accurate. Bonjour concedes that this would be the case if, in fact, the Doxastic Presumption was designed to be a response to a skeptical challenge. Bonjour admits that that kind of skepticism is perfectly coherent and perhaps even defensible but he argues that, "even if it is not possible in general to justify my representation of my own system of beliefs, it may yet be possible to argue successfully relative to the presumption that my representation is (approximately) correct that the beliefs which I hold are justified in a sense which makes them genuinely likely to be true; and this would be a significant epistemological result, even if not quite the one which would be ideally desirable." (BonJour, p.105-106)

It is not Bonjour's intention to respond to the kind of skeptical challenge that could be raised in this vein. What he is rather trying to show is that, within the boundaries of a coherence theory, it is possible to deal with many skeptical

challenges and isolate those challenges which are, in principle, unanswerable within the boundaries of coherence. Bonjour would, I think, argue that the same kind of skeptical challenge also faces the foundationalist and may even pose a more difficult question because of the inherent difficulty that the foundationalist has in accounting for the interrelationship of beliefs at any level (if we take into consideration the regress problem).

The second necessary element of Bonjour's metajustification is an observation requirement. Bonjour argues that a cognitive subject will count "certain spontaneously occurring cognitive states as reliable observation beliefs." [Christlieb, p.399] Bonjour argues that in any system of empirical knowledge there must be some connection with basic observation (this is a tenant of empiricism generally). There must be non-inferential and spontaneous new beliefs inputted to the system. Such an overall cognitive system will "initially attribute reliability to some kinds of spontaneously occurring beliefs." [ibid, p. 400] Although the justification of these beliefs will still be a product of achieving coherence with other beliefs in the system of a cognitive subject, but the observation requirement provides for continuing observational input. The requirement is, then, "that there be 'input from the extratheoretical world (Bonjour, p. 139)', but there is nothing in this requirement to assure that any of the belief types deemed

reliable within the system will actually be reliable" [ibid.] Such an observation requirement satisfies the need to have the cognitive subject's belief system connect in some fundamental way to the external world. The observation requirement is not, in itself, a justification at all. It is merely a necessary condition for bridging the gap between the theoretical and the extratheoretical world.

The last element of a successful metajustification is the requirement that the metajustification be entirely *a priori*, that is, that it must not ultimately rely on experience in order to provide a metajustificational reason for believing that the coherence of an agent's empirical beliefs is adequate evidence for concluding that those beliefs are true. Now BonJour says quite a bit about *a priori* knowledge and justification in The Structure of Empirical Knowledge and, as we will soon see, much of it requires careful unpacking and evaluation. I do not intend to pursue the details and criticisms of the *a priori* justification requirement at this time. For the moment I want only to briefly cover why it is important that the metajustification be, in fact, entirely *a priori*. I will return to detailed criticism of BonJour's program in this area in Section IV.

As I discussed when documenting features of the Doxastic Presumption, it is very easy for a set of metabeliefs to fall into either the problem of regress or the problem of (vicious) circularity. If a system of beliefs ends up ultimately

appealing to just the sorts of things that were originally in need of justification, for its own justification, then the original project of justification becomes circular. Likewise, if the metajustification, which is designed to show that a coherent set of first-order empirical beliefs will for the most part be true beliefs, ends up ultimately resting on experience (particularly empirical input of some sort), then neither the system of first-order empirical beliefs or the metabeliefs are really justified at all. The epistemic metajustification, if it is to provide a reason to believe that the coherence of one's own beliefs is evidence for the truth of one's beliefs, must not appeal to the first-order empirical beliefs in question for justification.

Some might argue for a shift to holism in an effort to claim that even though the system is circular, it is not viciously so. Bonjour is quick to point out that such a retreat will not help. He writes, regarding the Doxastic Presumption, that "...the very possibility of a nonexternalist holism depends on my having a cognitive grasp of my total system of beliefs and its coherence which is prior to the justification of the particular beliefs in the system. It is quite clear, therefore, that this grasp, upon which any nonexternalist appeal to coherence must depend, cannot itself be justified by appeal to coherence. And thus the very idea of a coherence theory of empirical justification threatens to

collapse." (BonJour, p. 102) I take it that his commentary applies equally well to the observation requirement.

So, if the metajustification is entirely *a priori*, then it itself does not appeal to some privileged set of empirical beliefs, and hence, a justification of a set of first-order empirical beliefs is at least logically possible without creating a circularity.

These three elements, the Doxastic Presumption, the Observation Requirement, and the requirement that the metajustification be entirely *a priori*, constitute the major considerations when formulating a metajustification. As we will see, only the requirements that the metajustification be entirely *a priori* and the Observation Requirement appear in the final formulation (as BonJour structures things), but nevertheless without the Doxastic Presumption it would be quite impossible to formulate a meaningful metajustification at all.

Before closing this section I want to do two things: First, spell out the three important epistemic commitments that BonJour holds, that is, metaphysical realism, the coherence theory of justification, and the correspondence theory of truth. These large-scale structural features of his epistemology all drive the need for a metajustification. If any of the three are eliminated, the need for a metajustification vanishes. Second, I want to briefly consider both BonJour's conception of what a "belief" is and

provide some passing commentary on "epistemic responsibility," both of which will come up in my criticisms of BonJour.

What is BonJour's thesis of metaphysical realism? Often it is contrasted with the thesis of anti-realism or idealism. William Alston provides what I think is a fair portrayal of the thesis of metaphysical realism. He writes that (metaphysical) realism is "the view that whatever there is is what it is regardless of how we think of it. Even if there were no human thought, even if there were no human beings, whatever there is other than human though[t] (and what depends on that, causally or logically) would still be what it is." (Alston, 1978-79, p. 779) BonJour refers to this passage and remarks that such a reality could be spoken of as a reality *an sich*; a reality of particulars having qualities and standing in relationships with one another. He is also quick to point out that the thesis of metaphysical realism is just that -- a metaphysical thesis with no immediate and particular epistemological implications. (BonJour, 1985, p. 160 - 161)

Secondly, there is BonJour's coherentist theory of justification. This is the most important reason why a metajustification is necessary. The metajustification is supposed to provide a reason to believe that, in the long run, there is no more than one coherent system of beliefs which can withstand continued observational input and not develop an internal inconsistency. In other words, given two rival coherent systems of belief, it is only a matter of time and

continued observation until one of the two systems either (1) develops an inconsistency, or (2) is "reduced" in some way to being a variant of the other system.

So now we see why the Doxastic Presumption is important to the metajustification: It is the Doxastic Presumption that accounts for the ability of the cognizer to have an approximately correct representation of his or her own set of empirical beliefs. Without such a presumption it would not be possible to evaluate one's own set of empirical beliefs in the appropriate kind of ways (e.g. by internal coherence).

Lastly, BonJour maintains a correspondence theory of truth. His position is quite traditional and he argues that he is "inclined to regard Aristotle's dictum as adequate by itself, so long as it is understood to cover not just the existence of things but also their properties or characteristics: to say of what is not or what fails to possess some property that it is or possesses that property, or of what is or possesses some property that is is not or does not possess that property, is false; while to say of what is and possesses some property that it is or does possess that property, or of what is not or fails to possess some property that it is not or fails to possess that property, is true." (BonJour, p. 167)

He adds only two minimal amplifications: First, that any objective reality will consist of particulars having properties and standing in relations. Second, that any

objective reality will have to involve a spatio-temporal dimensional structure and that the correspondence relation holds between singular empirical propositions and specific regions of space and time.

These three theses, working together, drive the need for an internalist metajustification. Given metaphysical realism and the correspondence theory of truth, there must be some independent reason provided for believing that a maximally coherent set of beliefs is, in fact, a true set of beliefs.

Lastly, I want to briefly consider both Bonjour's conception of what a "belief" is and provide some passing commentary on "epistemic responsibility". Recently both John Heil and Thieu Kuys have advanced some convincing arguments to the effect that Bonjour's conception of exactly what a belief is is in some way flawed. Much of what Bonjour takes a belief to be follows from his insistence that an epistemically responsible agent will accept all and only those beliefs as true which he or she is adequately justified in believing correspond to reality. Hence, those that are not adequately justified ought to be rejected or at least only provisionally accepted pending some kind of proof. Any other cognitive attitude of the agent ought to result in the agent being held epistemically irresponsible. This is the principle reason why Bonjour dismisses any form of externalism: In an externalist

theory, the agents are not required to provide adequate justifications when pressed on their empirical beliefs.

Has BonJour fairly captured what sort of thing a belief actually is? John Heil thinks not. Where BonJour seems to think that beliefs are entirely voluntary and that persons can and do cognitively accept and reject beliefs according to their will, Heil argues that "The phenomenology of belief, then, as distinct from its epistemological conceptualization, looks distinctly non-voluntary." [Heil, p. 357] What Heil ultimately objects to is BonJour's oversimplification of the belief-forming process. He believes, instead, that "There is considerable tension, then, in our ordinary ways of thinking about belief. On the one hand, believers seem responsible for what they believe; they seem in this regard doxastic agents. [BonJour's position] On the other hand, believers appear to be passive; beliefs are not chosen or rejected, but simply held or not. In this regard, believers seem to be largely at the mercy of their belief-forming equipment. An adequate account of belief must, I think, make this tension intelligible, must, if possible, illuminate its source." [ibid.]

Heil ultimately argues that BonJour's oversimplification of the concept of belief impoverishes his notion of epistemic responsibility by not taking the phenomenology of belief-formation seriously. Kuys is also critical of BonJour's notions of belief but presents his criticism

differently. His concern is much more with the notion of criticism and rational belief formation but, again, the point is similar -- beliefs are not all that BonJour takes them to be; they are not as simple and straightforward. [Kuys, p.47] I will come back to this entire issue in section IV when I explore the ramifications of BonJour's conception of a belief as it applies to the metajustification.

Lastly, I want to turn specifically to the concept of epistemic responsibility. I argued elsewhere that a functional definition of epistemic responsibility (for BonJour) would look something like this: An agent is epistemically responsible if and only if he or she accepts all and only those beliefs as true which he or she is adequately justified in believing correctly and accurately depict the world. [Lindberg, p. 70]

Now I have just raised the issue of whether or not BonJour's notion of a belief is an accurate one. But given his insistence that beliefs are ultimately voluntary and his insistence that epistemic agents be able to provide the justifications for all of their empirical beliefs when pressed, this characterization of epistemic responsibility seems fair to BonJour. As we will see in the next section, BonJour also insists on a metaphysical realism and a correspondence theory of truth, which gives rise to the last clause of the functional definition of epistemic responsibility.

I will turn now to section II. I will formulate explicitly the metajustification thesis and discuss what the thesis entails. My primary effort will be to evaluate the two premises on which the metajustification thesis rests and argue that the metajustification must be entirely *a priori* in character. I will also try to show the actual connections between Bonjour's three epistemic presuppositions to the metajustification and the metajustification thesis itself. I will then turn to criticisms.

Section II: The Metajustification

As we saw in the last section, BonJour is faced with the problem of linking a coherentist theory of justification to a correspondence theory of truth. The question naturally arises as to what possible assurance BonJour can give that a coherent set of beliefs is, in fact, a set of beliefs which correspond to reality. BonJour argues that what is required is a metajustification -- a second-order reason for accepting that the first-order set of empirical beliefs are true beliefs.

Another way of thinking about this is to say that the thesis of metaphysical realism, plus a correspondence theory of truth, plus a coherence theory of justification, implies the need for a second-order justification. This second-order justification (a metajustification) has been challenged on different grounds recently.³ Nevertheless, BonJour maintains that to avoid a collapse into either regress or vicious circularity it is necessary that a metajustification be offered.

The metajustification consists of two premises (P1 and P2) which support a conclusion, the "MJ thesis". In this

³ See Bender, et al, for many examples.

section I will explain the Metajustification Thesis (hereafter the MJ thesis) as BonJour develops it. I will unpack the premises (P1 and P2) and also discuss the degree to which the MJ thesis rests on a notion of (justifiable) *a priori* induction.

BonJour's MJ thesis is this: "A system of beliefs which (a) remains coherent (and stable) over the long run and (b) continues to satisfy the Observation Requirement is likely, to a degree which is proportional to the degree of coherence (and stability) and the longness of the run, to correspond closely to independent reality." (BonJour, p. 171)

So what BonJour is claiming is that any first-order set of empirical beliefs which can remain coherent both with other beliefs in the system and with new observational data is "likely" to correspond closely to the *an sich* reality. As the time over which this system remains coherent increases, then the "likelihood" of the system corresponding with the *an sich* reality also increases.

I have already discussed the Observation Requirement (in section I). The important fact to remember is that BonJour requires a continuing stream of observational data to be entering the system of empirical beliefs so that the system of empirical beliefs is responsive to changes in the external world. (Otherwise one could "stick his head in the sand," so

to speak, and retain a stable, coherent set of beliefs forever.)⁴

Notice also that BonJour is claiming that continued coherence and stability within the system of empirical beliefs is the evidence that the system of beliefs corresponds with reality.

Coherence is clearly central to BonJour's whole view, but what about stability -- why is that brought in? Stability is not part of the Doxastic Presumption⁵, the Observation Requirement, or even the requirement that the MJ thesis be entirely *a priori*. Why could not coherence, by itself, be all that is necessary to guarantee that the system represents reality?

But how do we know when a system is coherent given the flux of incoming observational data? What other criteria could be invoked that would provide some additional evidence or serve as a failsafe when coherence is desired? Possibly stability can serve as outside confirmation of the fact that a high degree of coherence has been achieved without directly invoking the notion of coherence itself. Possibly stability, for BonJour, is evidence of coherence. There is a relationship between having a stable system of beliefs and

⁴ My thanks to Dr. Richard Hall for the wording.

⁵ The Doxastic Presumption does not give a subject information about the degree to which beliefs are coherent. The Doxastic Presumption is the presumption that our beliefs about what beliefs we have are, overall, approximately correct.

having a coherent system of beliefs. My suspicion is this: For BonJour, although it is possible to have a stable system of beliefs that are incoherent and false, stability is evidence of coherence and, further, the degree of stability tends to rise with the degree of coherence. Now if this is what he believes it raises the issue of there being a hidden premise -- one to the effect that stability is an accurate guide to real coherence of beliefs. I will return to this issue in the fourth section when I discuss some Quinean and Kuhnian criticisms of the MJ thesis. What needs to be pointed out, though, is that there is no argument here. BonJour asserts that coherence and stability are necessary but he does not explicate that relationship. Further, any real explication reveals hidden premises. This makes BonJour's position clearer but also reveals where trouble can develop. I will indirectly exploit this rift between stability and coherence shortly.

Now BonJour rests the MJ thesis on two premises (P1 and P2). He does not claim that P1 and P2 directly entail the MJ thesis as stated. He does note that if P1 and P2 were formulated in a more formal way it would be possible to derive the MJ thesis validly. I assume that BonJour is correct about this. Nevertheless, it is important to note that an attack on either P1 or P2 does not directly imply an attack on the MJ thesis. I make this point in BonJour's defense because

virtually all of my criticisms are directed toward the premises.

I shall refer to his first premise as the "explanation premise". It states that

(P1) "If a system of beliefs remains coherent (and stable) over the long run while continuing to satisfy the Observation Requirement, then it is highly likely that there is some explanation (other than mere chance) for this fact, with the degree of likelihood being proportional to the degree of coherence (and stability) and the longness of the run." (BonJour, p. 171)

Notice the language that BonJour uses. There are at rock bottom two clauses here: The "some explanation" clause and the "degree of likelihood" clause. The explanation premise does not invoke any specific reason for believing that coherence is a guide to truth, it merely notes that there should be some reason other than mere chance, and that the chances that there is some reason are greater as stability and coherence continue over time.

I think that it is important to note, contrary to BonJour, that "mere chance" can constitute an explanation for long run coherence and stability. BonJour's argument is that "mere chance" is no longer a probable candidate given long-run stability and coherence.

I think that this claim rests on an unspoken intuition that even if mere chance was the cause for an initial high degree of coherence and stability, it could not explain the long run continued input that the Observation Requirement imposes on the metajustification. Essentially, that even if

coherence was initially present by chance, an active observer would discover discontinuity in his or her belief system through an investigation of the *ad sich* reality around them.

This leads us to P2, the "best explanation" premise. It states that

(P2) "The best explanation, the likeliest to be true, for a system of beliefs remaining coherent (and stable) over the long run while continuing to satisfy the Observation Requirement is that (a) the cognitively spontaneous beliefs which are claimed within the system to be reliable are systematically caused by the sorts of situations which are depicted by their content, and (b) the entire system of beliefs corresponds, within a reasonable degree of approximation, to the independent reality which it purports to describe; and the preferability of this explanation increases in proportion to the degree of coherence (and stability) and the longness of the run." (BonJour, p. 171-2)

Here we see three clauses, a "best explanation" clause, a "reliable cause" clause, and an "entire system" clause. In some ways the "best explanation" premise is down the slippery slope from the "some explanation" premise. If we agree that there is "some explanation" for the long run coherence and stability of our belief system, then BonJour seems to think he can go on to stipulate just what that explanation is. It is important to note that P1 does not strictly imply P2. Of course BonJour does not think it needs to, he is merely arguing that P1 and P2 jointly imply the MJ thesis.

Notice the first clause, the "best explanation" clause. BonJour is assuming that the best explanation is the "likeliest to be true". This is a critical point in his

epistemology. This is the point where he is putting the concept of a *a priori* probability to work. When he writes that the "best explanation" is the "likeliest to be true" he means it quite literally -- given all the possible alternative explanations for our experience, the highest probability is that our experiences are caused by just the sorts of external objects depicted by the mental contents. The MJ thesis rests on this notion of a *a priori* probability (and the accompanying induction). In section IV I will critique this claim. It is the basis, not only of a fully-developed MJ thesis, but also his rejection of skeptical alternatives (they are just too improbable in his estimation).

The "reliable cause" clause (clause (d)) is interesting because it puts Bonjour's theory, to a limited extent, in the camp of the causal theorists of knowledge. Here he is actually claiming that the content of the propositional attitudes that one comes to hold are systematically caused by events/things in the external world. Now this raises some interesting questions about causal theories of knowledge. Not the least of which is whether it is consistent to maintain a hardline internalism and also defend a causal theory of belief-formation.⁶ If our beliefs are really systematically caused by the sorts of situations depicted by their content, then why not defend a strictly Goldmanesque causal theory of

⁶ As we will see, under one interpretation Bonjour is a foundationalist at the level of the metajustification. His theory might be trifurcated.

knowledge? Secondly, why defend this causal account at the meta-level but not at the level of first-order justification (at that level it is a pure coherence account)? Also, if we defend a causal account of knowledge (particularly at the meta-level), how do we account for all of the old externalist problems like the problem of error? The externalist was at least able to appeal to external factors in explaining error but BonJour is unable to make the same moves and remain epistemically responsible.

I will not pursue these questions in this paper as my criticisms are along different lines. Nevertheless I think it is an important problem and one which BonJour has not resolved at all. I think that the burden of proof is on BonJour at this point to clear up this irregularity.

There is another aspect of clause (d) which needs some discussion. Some philosophers have argued that our more theoretic scientific beliefs inform our more basic and crude direct observational beliefs, and vice versa. I do not think that BonJour is requiring that all of our observational beliefs (in the crudest form) are accurate guides to reality. Rather, he is allowing, by clause (d), that irregularities in our sensory experience be cleared-away by appeal to the infrastructure of our existing theoretical beliefs about the relationships between objects and the sensory surfaces of our bodies.

Observational beliefs are not "privileged" in the way that Descartes or Locke would have it. It is precisely that kind of foundationalistic epistemology that BonJour is avoiding. To take a classic Russellian example⁷ -- our belief that the desk is a spatio-temporal three-dimensional semi-permanent physical object is not a simple observational belief. As we move about the desk the object itself exhibits only changing qualities. This, of course, contradicts our more theoretical beliefs about the desk. The holism of BonJour's MJ thesis is, in part, an attempt at getting inconsistencies of this sort out of the way. Our knowledge of the desk requires an interplay between our basic observational beliefs and both basic and not-so-basic theoretical beliefs about external objects, psychology, language, and our bodies.

As I indicated in section I, the metajustification is teleological -- it is aimed at providing the agent a link between justified belief and truth. The link is holistic in just this way: BonJour wants to insure that the whole system of empirical beliefs in all its many facets provides a systematic account of the world, an account which (in his words) "hangs together" -- an account that illuminates the reciprocal support of whole sets of empirical beliefs.

In this section we have examined the MJ thesis in some detail. Most of my efforts have been directed towards

⁷ See Russell, 1912, chapter II for a lively discussion of these problems.

explicating the two premises on which the MJ thesis rests. It is my belief that any successful attack on the MJ thesis would be best handled by isolating the problematic premise on which the MJ thesis rests.

Section III: Criticisms

In the last section I examined the MJ thesis in detail and connected the thesis with Bonjour's rationale of providing a second-order reason for accepting that the coherence (and stability) of one's first-order set of empirical beliefs is actually evidence for believing that a maximally coherent set of beliefs is a true set of beliefs: An account of an *sich* reality in its many facets. In this section I want to establish that there are at least four reasons for believing that the metajustification is inadequate.

I will offer four general kinds of arguments. I will argue that (1) it is possible for a maximally consistent set of empirical beliefs to be false and that Bonjour's theory cannot guarantee otherwise, that (2) Bonjour's own strong demand for epistemic responsibility described in section I has not been met at the level of metajustification, that (3) Bonjour's theory is, at best, a map of how agents ought to reason about empirical knowledge but that it is quite impossible, if that is the case, for anyone to actually follow Bonjour's program, and (4) that the metajustification cannot rule-out alternative and radically incompatible theories

because there can be multiple maximally consistent and incommensurable theories that account for all possible observation.

If my arguments are successful, then it would show either (1) that Bonjour's argument for the necessity of this particular MJ thesis is unsound, or (2) that at least one of Bonjour's commitments (which function exactly like premises, e.g. metaphysical realism) is false, or (3) that even if Bonjour's argument is sound, believing it has not been shown to be epistemically responsible.⁸ Although I will not specifically formulate Bonjour's entire argument, P1 and P2 do seem to be fairly clear statements which encapsulate the spirit, if not the letter, of Bonjour's commitments. If my criticisms of the MJ thesis, P1, or P2, are sound, then it would imply that at least one of Bonjour's commitments must be given up.

1. Skepticism: Early in The Structure of Empirical Knowledge Bonjour formulates three problems which an adequate metajustification must overcome if it is to be considered a viable option for consideration. The second of those three problems warrants special attention: It is the internalist problem of the availability of the metajustification to the

⁸ Bonjour's argument is that (P1 & P2) implies MJ. Assuming that the implication holds, if the two premises are true, then the MJ thesis must be true and, furthermore, if the MJ thesis is false, it implies that at least one of the two premises is false.

actual cognitive subject in question. Bonjour argues that such availability is a necessary, but not a sufficient condition, for a fully adequate metajustification. There is a strong connection here with the condition of epistemic responsibility -- both the justification and the metajustification must be internal. If the metajustification is not available to the subject then the subject has no guarantee that the first-order justificatory system is appropriately linked to the cognitive goal of truth. The purpose of requiring a metajustification in the first place is to insure that the cognitive subject's justificatory mechanisms be actually truth-conducive. Hence, if not available to the subject, the metajustification would have no real utility, i.e. the subject would never strictly be able to "know" anything.

There are traditionally three possible solutions to this problem. The first is to change the notion of truth. Truth could be redefined as "justification in the long run." This has been the solution offered by both pragmatists and absolute idealists. The claim here is that short-run justification is conducive to long-run justification and, as a result, to truth. Hence justification is conducive to truth. The problem is that "because the accounts of truth have no independent claim to acceptance, the metajustifications based

upon them are...dialectically ineffective." (BonJour, p. 11)⁹ BonJour is holding out for a stronger definition of truth. Simply changing the definition of truth to accord "with that which is justified" is too weak. Particularly in light of his insistence that the goal of epistemic justification is truth. Perhaps BonJour has in mind the nature of scientific revolutions (although I think not, as I will show in a moment). Long-run predictive success and observational coherence (and stability) does not necessarily mean that a justified theory is a guide to truth.

The second solution (and the one that I am most interested in) is to make some kind of appeal to "common sense". This is the tactic proposed by epistemologists such as Moore and Chisholm. The solution is an attempt to defuse the problem rather than solve it. Chisholm asks two questions: First, what is the extent of our knowledge? Second, what are the standards of our knowledge? Chisholm's argument is that the two questions are so linked that by answering one question it is possible to answer the second.

This gives rise to a serious trilemma. Either we assume we know the extent of our knowledge or we assume we know the correct criteria for knowledge. If we fail to assume either,

⁹ I assume that BonJour is just paving the way to his own theory, the suppressed premise being that any adequate metajustification must have an independently justified theory of truth to back it up. BonJour never directly comments on this, though, and my hunch is mere speculation. Still, without some argument, this claim is probably false.

then we end up a skeptic with regards to knowledge. What Chisholm ends up adopting is what he calls "critical cognitivism". Chisholm embraces the first alternative by accepting common sense views as to the extent of our empirical knowledge and then sets out the conditions (as a set of principles) under which we could have such knowledge. BonJour writes that "These principles clearly constitute at least an approximate account of a standard of epistemic justification. But they are apparently to be defended (though Chisholm is not as explicit on this point as one might like) not on the grounds that following them is conducive to arriving at truth but simply and solely on the grounds that they yield correct results, from the standpoint of common sense, with respect to the extent of our knowledge. Chisholm's view seems to be that this is the only sort of metajustification which is really necessary for such a standard of justification." (BonJour, p. 12)

BonJour notes that if such an appeal to common sense were reasonable, then this kind of metajustification would not be inadequate.¹⁰ His objection is that by taking this particular tack, Chisholm rules out even weak variations of skepticism from the beginning of the inquiry. For Chisholm, the fact of knowledge is presupposed, the goal is to find a justification for that knowledge. BonJour says, "If knowledge requires that one be in possession of a good reason for

¹⁰ See Kaplin for more on this.

thinking one's beliefs to be true, then the possibility of skepticism cannot be eliminated in this easy way." (BonJour, p. 13)

In rejecting Chisholm's metajustificatory solution, BonJour does seemingly embrace skepticism as a possibility. He sees the skeptical issue as a very real problem and is trying to devise a solution which takes it equally seriously.

The third solution is to make an initial presumption of common sense with regard to what we know, but retain the option of defeasibility. This solution is made more complicated by requiring that the cognitive agent look for a justification of some kind. The presumption of common sense is defeasible if the agent is unable to arrive at a philosophical justification which accords with the presumption of common sense. The solution is better than Chisholm's solution because it takes seriously the problem of skepticism.

The fact that the solution takes the problem of skepticism seriously is good. However another problem develops. BonJour writes that "[The basis of the view] seems to be simply the conviction that no adequate answer to or refutation of skepticism is to be had, so that any inquiry which makes such a refutation its goal is doomed to failure and should be abandoned. Such a stance toward skepticism seems to me to be fundamentally mistaken. For a proponent of an epistemological theory...to admit that no response to the skeptic is possible is in effect to concede that the belief is

true; and, for reasons already discussed, such a concession destroys the claim of the theory to be an account of epistemic justification or acceptability in the first place." (BonJour, p. 14)

He, therefore, rejects the defeasibility approach (seemingly because it fails to take the problem of skepticism seriously enough) and maintains that the problem of skepticism remains a very real concern. He thinks that a reply to the skeptic is possible (in the form of his theory of epistemic justification) but he realizes that the key component is his metajustification. Without an adequate metajustification the justification will not know that justified beliefs are likely to be true. BonJour is unwilling to change the notion of truth and he is unwilling to appeal to common sense. All agents have an epistemic responsibility to be sure that their justificatory standards are likely to produce true beliefs and not false ones. The metajustification must insure that the justification can meet the demands of epistemic responsibility and further insure that the cognitive subject be able to verify that the empirical beliefs which are held are true and that skeptical doubts are not an alternative.

My objection is that BonJour's metajustification thesis fails to take the skeptic seriously by appealing to "common sense" in the way that Chisholm's critical cognitivism did. Note that BonJour is not simply redefining truth or presuming knowledge, therefore, he is not dismissing the skeptic by

fiat. Remember, though, that BonJour was highly critical of the fact that Chisholm, by ruling out all kinds of skepticism, had devised an irresponsible epistemology by asking that the cognitive subject accept beliefs which the subject could not be adequately justified in believing correctly and accurately depict the world.

What is the skeptic proposing? The skeptic is proposing that it is entirely possible that an evil genius or a braino cap could very simply create an alternative system of beliefs which are both (a) coherent (and stable) in the long run, and (b) will continue to satisfy the observation requirement. Given the two rival hypotheses, would it not be impossible for a cognitive subject to tell (internally) which is the real state of affairs? Is this not the real substance of the skeptical challenge?

In order for BonJour to reply to the challenge he must only appeal to the two premises on which the MJ thesis is based. There should be nothing in the thesis itself which is not contained in the premises.

The first premise is of no help to BonJour, it merely asserts that there is "some explanation" for the fact that the cognitive subject has a coherent set of beliefs. It makes no claim toward defining what the source, and more importantly the nature of the source, is. It could just as easily be the case that an evil genius is creating a stable and coherent set of empirical beliefs in the brain of the cognitive agent.

According to BonJour's premise, the likelihood of the possibility of an evil genius being the cause of my beliefs increases as time goes by, just as the likelihood of a physical world being the cause of my beliefs increases. If the only condition is that there be some explanation, then any explanation will do. The only condition is that, given an explanation, if an agent's belief system remains coherent (and stable) with observational input over time, then the explanation becomes more probable.

The second premise is more interesting, but embracing it will lead to even more significant problems for BonJour. The second premise asserts that the best explanation for a system of beliefs to remain coherent (and stable) and satisfy the Observation Requirement is that (a) the cognitively spontaneous beliefs (the empirical data of the senses) are claimed to be systematically caused by the sorts of situations depicted by their content, and (b) that the entire system of beliefs corresponds, within a "reasonable degree of approximation" to the external world it purports to describe; and the preferability of this explanation increases in proportion to the degree of coherence and the longness of the run.

What BonJour is really saying is that the best explanation (the likeliest to be true and, therefore, the correct explanation) for the coherence and long-run observational success of our system of beliefs is due to the

fact that the system is caused to be coherent by an independently coherent *an sich* reality which is, in fact, structurally similar to the beliefs that an agent has about it.

BonJour is claiming that given the two alternatives (of choosing between the skeptic and the position of science-by-observation), the best explanation is science. He is claiming that one ought to prefer the explanations of science over the skeptic given the long-run success of science.

To this more sophisticated claim I have two objections: (1) BonJour still fails to understand the strength of the skeptical position, and (2) this reply to the skeptic, by BonJour's own standards, is epistemically irresponsible.

First, I still think that BonJour fails to understand the strength of the skeptic's position. The skeptic is arguing that there are many alternative possible and consistent explanations for all of our sensory data which are perfectly coherent, stable, and that will certainly satisfy the Observation Requirement over the long-run. The power of the skeptical position lies in the fact that the skeptic is able to devise a perfectly coherent explanation for our sensory experience which does not accord with our "common sense" conception of reality.

For example, the pig, who for months has come to expect that the farmer will bring him breakfast every morning, is suddenly surprised to find discover that on this morning, he

is breakfast for the farmer. In a similar way, the skeptic is arguing that we come to have certain beliefs because we have become conditioned to believe certain things. The skeptic is arguing that there are many perfectly coherent alternative explanations for our experience. To assert that the "best explanation" (which is clearly an epistemic value judgement) for our sense experience is that an external physical world is causing those sensations in us, is to make a judgement that requires some additional empirical verification -- in this case, verification which we as cognitive agents are unable to obtain as there is no transcendental perspective at which those observations could be made.

BonJour is making the same mistake that he accuses Chisholm of making by grounding his metajustification though a mechanism as epistemically reliable as common sense. BonJour's version is more elaborate but is structurally very similar. BonJour is appealing to the notion that the long-run consistency in beliefs is attributable to just the sort of events depicted in the content of the subject's belief system. BonJour rules out the possibility of a skeptical alternative explanation (e.g. evil genius) by arguing that such an alternative explanation is less likely, given the successes of our particular belief system in describing reality as an independent external world of particular objects having particular qualities and standing in particular relations, to correspond with reality. His reasoning for this claim must be

entirely made *a priori*. Unless the reasoning is *a priori*, the metajustification will suffer from either regress or it will bring into question the soundness of the reasoning which supports the metajustification in the first place. In order to avoid this he must argue that it is possible to know that the metajustification is sound, *a priori*.

Second, it seems that BonJour's metajustification fails to be epistemically responsible. Given the nature of BonJour's metajustification, I do not think that a cognitive subject is adequately justified in believing that his or her beliefs correctly and accurately depict the world. It seems that the support for BonJour's metajustification is an appeal to a kind of "common sense realism" similar to the way that Chisholm appealed to common sense views about the extent of our empirical knowledge. It rests on the notion that the long-run predictive success of our system of beliefs insures that the best explanation is the common sense realist (or scientific) explanation. BonJour is basing his justification of future predictive success (and correspondingly the accuracy of his system to depict reality) on an inductive argument that experience, in the long-run, is a good guide to reality.

It is precisely this appeal that I now want to turn to. I shall argue that BonJour's defense of *a priori* induction is unjustified -- specifically that it takes far too much for granted.

2. A Priori Induction: W.V.O. Quine has called it "the Humean predicament."¹¹ How do we justify inductions in a way which is not either circular or infinitely regressive? The traditional Humean problem of induction, though troublesome, is not generally thought to pose a meaningful threat to a naturalistic or scientific epistemology. For Bonjour's internalist and coherentist epistemology, though, the problem of justifying induction is critical.

The need to provide a justification for induction is realized in two stages: First, the metajustification uses induction to provide the cognitive knower with a reason for believing that the coherence of her first-order empirical beliefs is evidence as to the truth of her first-order empirical beliefs. Bonjour invokes "high probability" as the basis for the MJ thesis. And any account of probability relies at some level on the worthiness of induction as a method of computing probability -- probability is meaningful because patterns in the future will tend to resemble patterns in the past. Therefore, a justification for induction (and probability theory in general) ought to be forthcoming if Bonjour wants to use probability theory as part of his metajustification.

¹¹ Quine actually writes that, "The Humean Predicament is the Human Predicament." (Quine, 1969, p. 72) This comes in his discussion of Hume's views on the doctrinal side of the epistemology of natural knowledge.

Second, even if an account of probability and induction were forthcoming, the account would have to be entirely *a priori* or it would result in the metajustification going circular. David Hume has provided compelling reasons to believe that no such *a priori* account could be made out. Bonjour cannot even appeal in a circular way to experience to justify experience. This would then make the MJ thesis circular. Hence, a Reichenbachian solution is also unavailable to him.

This is a genuine problem. Bonjour is an internalist with (I would say) a rather overdeveloped sense of epistemic responsibility. All responsible agents must have a metajustification for themselves. Hence, each agent must individually have either a justification for induction or their metajustification becomes unjustified. The only other alternative is to be an epistemically irresponsible knower, in which case pretty much anything goes as far as Bonjour is concerned. That will not do.

Now, What is the problem of induction? It is simply that, for all of our inductive beliefs about the world (virtually all our empirical beliefs about the world are inductive -- perhaps all of them are), there is a reoccurring pattern of circularity -- using past experiences to justify belief that certain future events will occur with some probability. If this method of justification was valid, and we knew it was valid, it would be possible to justify a great

many of our empirical beliefs based on the meager sum of evidence our senses provide us with. Unfortunately, induction has never been justified successfully.

Jonathan Dancy writes that, "Inductive reasoning occurs when we take our reasons to be sufficient to justify our conclusion, without being conclusive in the sense that [it is impossible for our reasons to be true and our conclusions to be false], or when we think we have some but not yet sufficient reason for the conclusion, hoping perhaps that further reasons may yet be found so that the sum total of reasons will be sufficient. This can most clearly be expressed in terms of probability. A successful inductive argument is one which makes its conclusion probable, or more probable than any equally detailed alternative..." (Dancy, p. 197) Dancy's comparison between induction and probability is no accident -- the two concepts are closely intertwined.

On the problem of justifying induction David Hume wrote, "I shall venture to affirm, as a general proposition which admits of no exception, that the knowledge of this relation [in this case, cause-and-effect inferences] is not, in any instance, attained by reasoning *a priori*, but arises entirely from experience, when we find that any particular objects are constantly conjoined with each other." (Hume, p. 42)

In trying to justify one's inductions and, generally, the rational process of the measuring of probability, a responsible agent has two possible tacks: First, she could

try to justify induction from past experience *a priori*. But as Hume has pointed out, the belief that the past is some reliable guide to the future is neither analytic or necessarily true. There is "no contradiction...implied by supposing it false." (Dancy, p. 15)

The other tack would be to try to justify induction *a posteriori*. But that will not do either. Such an argument would involve claiming that past experience is itself a reliable guide to future experience and then utilizing, as an "independent" justification, the belief in question that past experience is a reliable guide to future experience. This is not to argue to the claim in question but rather *from* it. The argument would be viciously circular.

Why is all of a problem for BonJour? Remember that he proposes to justify his first-order empirical knowledge claims with a metajustification. This metajustification (based on P1 and P2) uses induction to justify the method of coherence as a guide to truth. Further, those justifying inductions are made entirely *a priori*. Hence, BonJour is arguing that is it possible to know, synthetic *a priori*, that long run coherence is a guide to the real structure of the *an sich* world.

For the clearest statement of this in the MJ argument, look at P1: "If a system of beliefs remains coherent (and stable) over the long run while continuing to satisfy the observation requirement, then it is **highly likely** that there is some explanation (other than mere chance) for this fact,

with the **degree of likelihood** proportional to the degree of coherence (and stability) and the longness of the run." (BonJour, p. 171, my emphasis)

Here BonJour goes so far as to specify an *a priori* formula for computing the degree of likelihood that there is some explanation for the coherence of an agent's beliefs. Presumably from the population (or a sample) of all of the beliefs that an agent has, it would be possible to analyze the degree of coherence and then, by using this principle, conclude with BonJour that there is some explanation for this phenomena other than "mere chance."

Now, all of this rides on the notion that it is possible to generalize from the specific set of beliefs that some agent has at time t_1 , and conclude that the reason that those beliefs are coherent is due to some facts of the empirical world (which are not subjectively dependent) and not due to random chance, further an agent ought to be able to conclude with greater and greater assurance that the empirical world is the way she in fact thinks it is. While granting that this might be an inevitable fact of cognitive practice and simply a description of a process that rational agents do (an observation that Hume, himself, found compelling), it is still an open question if there is some independent argument that can be advanced to show that this induction is warranted. It is an induction that long-run coherence is evidence that an

sich reality is ordered, hence, it requires some independent justification.

As I discussed, empirical inductions (about causation) can be invalidly justified by appealing to past experience. BonJour's metajustification cannot even do this: The metajustificatory argument is supposedly true *a priori*, and therefore cannot use the facts of experience to justify predictions either of the future or even of the present moment.

Note also that even if experience bore the predictions of the metajustification out, it would not help to justify the inductions. Say that the system of beliefs is 99.7% likely to correspond to independent reality based on the degree of coherence, stability, and longness of the run. Furthermore, say that through some reliable independent mechanism it turned out that one's beliefs did correspond to independent reality in exactly 99.7% of all cases. Is BonJour justified in arguing that the MJ thesis is justified?

No. If BonJour simply argued that the 99.7% statistic was direct evidence that the MJ worked, he would be justifying his supposed *a priori* principle through an *a posteriori* method. If BonJour argued that the identity of the statistics was evidence that the MJ thesis simply "worked", then we might have a method for determining when our beliefs were in general right, but we would have no reason for justifying our use of that method. (We see the same problem in causation -- we

believe that X causes Y, but we cannot justify our belief that X causes Y, Hume argued that it was custom and habit.)

A priori synthetic knowledge, if it exists at all, is particularly difficult to justify when it invokes induction in any way. Not only are the traditional Kantian problems difficult to solve, but the Humean arguments come into play as well. Solving only half the problems leaves us with only half a solution.

But why is this really a problem for BonJour? Why does BonJour have to provide an analysis of induction? Does not the metajustification take care of that? Remember that BonJour demanded that a reply to the skeptic be available to the cognitive agent personally. The agent must be able to utilize the metajustification argument for herself whenever skeptical doubts of any kind arise.¹² But the critical metajustification needs a priori induction to work as a justificational mechanism for first-order empirical beliefs. So, A priori induction needs an independent justification (a meta-metajustification, perhaps) and, furthermore, the agent herself must know what that third-order justification is and how it works. The internalist requirement of "possessing the

¹² See Alvin Goldman (1989), p. 106 for a detailed discussion of this clause. The requirement of "possession of the metajustification" raises many independent problems.

metajustification" and the stringent requirement of epistemic responsibility makes this the case.¹³

BonJour, in his defense, does provide a traditional rationalist account for general *a priori* justification (it is in an appendix of his book). According to him, pure mental processes can generate both contingent and necessary propositions and can provide justifications for the *a priori* beliefs which are independent of his metajustification.

But, as Alvin Goldman has shown, this makes BonJour's account "fundamentally bifurcated." (Goldman, 1989, p. 113) As he argues, BonJour suffers from a massive internal inconsistency if the appendix is taken seriously. In this new light, according to BonJour's theory, *a priori* beliefs are not justified coherently (they are supposedly foundational) and they do not require a metajustification.

Goldman's criticisms are serious and are probably insurmountable for BonJour. But even if Goldman's objections turn out to be unfounded, it does not really affect my more restricted criticisms. BonJour still has the requirement of epistemic responsibility to deal with and he has provided no independent *a priori* justification for induction. Hume's arguments still stand; induction demands an independent

¹³ Bonjour's commitments to this concept run deep. He writes that "On an internalist view [like his], being epistemically responsible, rather than irresponsible, in accepting a belief is at least a necessary condition for that belief being justified. It is natural to take it, as I do in the book [SEK], to be a sufficient condition as well..." (BonJour (1989), p. 277)

justification which BonJour cannot provide. The metajustification might not suffer from any deep regress (in the end, neither Goldman nor I think that it does), but it still ends up suffering from either circularity at the "meta-meta level" or internal inconsistency -- both are serious problem for any coherentist.

3. BonJour's concept of a belief: As we have seen, the requirements of internalism and epistemic responsibility repeatedly conflict with BonJour's own metajustification. The agent, it seems, needs to know so much, both about the status of their own beliefs and about the structure and processes of metajustificational epistemology. Though it seems like (only) a "practical" concern, there are reasons for doubting the adequacy of the MJ thesis on these grounds alone.

John Heil has argued in two articles for the importance of a realistic critique of what he calls "doxastic agency". (see Heil, 1982 and 1983) Epistemic responsibility seems closely tied to epistemic voluntarism, that is, the conscious process of accepting and rejecting beliefs based on the epistemic merit of those beliefs.

Heil writes that "BonJour suggests...that epistemic agents who accept unwarranted beliefs, violate their 'epistemic duty' (BonJour, 1980, p. 65)....BonJour appears to differ from Descartes in advancing the notion that it is *beliefs*, rather than neutral mental contents, that are

scrutinized then endorsed or rejected by the epistemic agent."
(Heil, 1983, p. 356)

I think it has been shown beyond doubt that in The Structure of Empirical Knowledge Bonjour thinks that this is the case. Many times he argues that the agent must be able to tell for himself when he knows. Furthermore, if a belief is false or unwarranted, it needs to be rejected outright by the agent if he is to fulfill his epistemic responsibility. However Heil notes that,

In contrast to the picture painted by the voluntarist, our beliefs seem mostly forced on us. Or if that is too strong, they come to us unanticipated and unbidden. We find that we believe this or that, we find ourselves incapable of believing certain other things. The skeptic's doubts about tables, chairs, trees, and minds are, we suspect, philosophical artifacts and in an important sense *frivolous*. It is not that these doubts could not be warranted, but that they do not reflect the skeptic's real beliefs about the world. To exorcise those, one needs more than a strong philosophical will." (Heil, 1983, p.357)

Heil develops a sophisticated account of what he calls the *phenomenology of belief formation*. He argues that this account is an accurate description of what epistemic agents unavoidably do every day, that is, form beliefs left and right. The important conclusion that he draws from his investigations is that epistemic voluntarism, if it is true at all, is only true for a fairly small subset of our beliefs. "Epistemic responsibility" is not, therefore, meaningful when we talk about accepting or rejecting particular beliefs, rather, it is meaningful when we talk about establishing

procedures for determining how we will acquire beliefs in the first place. Epistemic responsibility, if it is going to be sensible at all, is a methodological issue and not a kind of belief-filter to be employed after the fact. We are not really epistemic voluntarists in any broad sense. We are perhaps only voluntarists when it comes to selecting our belief-generating procedures.

If Heil is right (which I think he is), then it brings into question the adequacy of Bonjour's concept of belief and his commitment to epistemic voluntarism. The fact that Bonjour has an unrealistic account of belief formation and dismissal is not itself all that important but it does impact both the internalist restriction of epistemic responsibility and the adequacy of the metajustification.

On the epistemic responsibility side, it is not clear that Bonjour is being fair. He requires epistemic responsibility (he even argued at one point that it was a sufficient condition for knowledge), but the requirement that he gives is so restrictive and unrealistic that I seriously doubt whether anyone could pass it. It is only partly methodological -- the rest of the requirement has to do with accepting and rejecting this or that belief based on warrant.

On the metajustification side, things are just as bad: In order for anyone to know anything it is necessary that they personally be able to provide a metajustification for the set of all their beliefs. The Doxastic Presumption will not help

here. Each belief that is pressed for justification must eventually be examined.

If the metajustification thesis is implicitly believed but not formally established by some agent, then there is some reason to believe that the agent has the prerequisite for other knowledge (in general). Otherwise, the epistemologically unsophisticated are relegated to total ignorance of everything, as skepticism is still a viable and maybe probable alternative.

But BonJour's requirement of voluntarism is even tougher than that. Not only is skepticism a viable alternative and a defeater for having knowledge -- it might be the only alternative for those who may not even understand skepticism. The burden of proof for an epistemic voluntarist is always on the agent to show that they have an adequate internalist metajustification, not on the skeptic to show otherwise. Ignorance of skepticism does not insure that knowledge is possible -- only an appropriate metajustification can do that. Hence, BonJour's voluntarism in some ways is the most massive systematic denial of the fact of knowledge for maybe 99.99% of the world's population. Unless an agent has accepted BonJour's theory or has either implicitly or explicitly worked out an adequate metajustification for himself, BonJour is (hopefully unintentionally) arguing that the agent knows absolutely nothing.

I take this to be a *reductio ad absurdum* both of BonJour's concept of the nature of belief and his account of epistemic responsibility. Doxastic voluntarism is unrealistic and, when joined with his particular views on epistemic responsibility, makes the metajustification thesis strange and unrealistic as well.

4. Quinean and Kuhnian Criticisms: There is a tenuous relationship between traditional epistemology and the philosophy of science. For absolute idealists (for example), philosophy of science does not necessarily play a part in the process of doing epistemology, but for traditional empiricists the philosophy -- and practice -- of science can play a significant role in shaping what will be considered an acceptable epistemology.

In the philosophy of science, there are three basic views that one could take regarding the interpretation of scientific theories. The first view, *logical empiricism*, is a product of the philosophers of the Vienna Circle. Logical empiricists tend to hold that the verificationist theory of meaning determines what terms employed in some given scientific theory are cognitively significant and which are not. Logical empiricism, as a movement, has lost popularity but logical empiricism and verificationism worked together to give rise to two more recent ways of interpreting scientific theories, namely, *scientific realism* and *social constructivism*. I would like to examine the adequacy of BonJour's epistemology

(particularly the metajustification) relative to these two interpretive theories.

Why would I take this approach to Bonjour's epistemology? Bonjour is a coherentist but he adopts a correspondence theory of truth. The metajustification is supposed to fuse these two views together. A coherent set of beliefs which can remain stable in the face of a continuing flow of new observational input over long periods of time guarantees (according to the MJ thesis) that the set of beliefs represent the world as it is in itself. But what if it was possible that a completely coherent set of beliefs, that was receiving new observational input and satisfying the conditions of the metajustification over time, *did not* correspond to an independent reality?

I think that what it would show (if the conditions really did obtain) is that either there is no independent reality out there for the empirical beliefs to correspond with, or that the metajustification was not itself sufficient (or perhaps that the metajustification was flawed). Bonjour is a scientific realist and he is convinced that there is an *an sich* reality. That is why he argues for a correspondence theory of truth in the first place. But he must be able to defend his views against empiricist criticism from the philosophy of science.

Specifically, as a scientific realist, he must be able to defend his theory against constructivist and antirealist attacks. If he fails then it calls into question the adequacy

of the metajustification.¹⁴ I will offer two such attacks and show how Bonjour's theory fails to provide an acceptable response. What this will show is that the metajustification is deeply flawed inasmuch as it cannot guarantee that coherency is a guide to truth.

4a. The Underdetermination of Theory by Evidence. W.V.O. Quine has written in *Ontological Relativity*, *Two Dogmas of Empiricism*, and *Epistemology Naturalized*, about what he calls the problem of "underdetermination of theory by evidence" and about the strong connections between "background theory" and observation.

In brief, the problem that Quine points out is that judgements about ontology (as he says, the way we "carve up the world") are all made relative to some background theory which affects the way we make ontological discriminations. These background theories are deeply entrenched and affected by the choice of a language and the choice of what to take as the "objects" or ontic units. These decisions are significant in that it is impossible to clearly stipulate where observation ends and the background theory begins. Quine writes:

Thus ontology can be multiply relative, multiply meaningless apart from a background theory. Besides being unable to say in absolute terms just what the objects are, we are sometimes unable even to distinguish objectively between referential

¹⁴ This is because the metajustification is supposed to provide the reason why the coherence of first-order beliefs is evidence for the truth of first-order beliefs.

quantification and a substitutional counterfeit. When we do relativize these matters to a background theory, moreover, the relativization itself has two components: relativity to the choice of a background theory and relativity to the choice of how to translate the object theory into the background theory. As for the ontology in turn of the background theory, and even the referentiality of its quantification -- these matters can call for a background theory in turn. (Quine, p. 67)

It seems impossible to escape relativism of some kind. All of our various empirical judgements, no matter how coherent and guarded, are conditioned by our choice of language and our choice of background theory. Importantly, this is not an issue of equilibrium. Even if all of the elements squared perfectly with one another, achieving total coherence, the whole project would represent an "open-ended" attempt at fixing ontology; and hence, fixing reality. By open-ended, I mean of course what Bonjour means, that a theory is open to an influx of new observational data and new theoretical and linguistic commitments. Ontology is forever relative to these background theories, assumptions, initial conditions, and non-empirical elements. What Bonjour has underestimated is the degree to which non-observational or non-empirical issues play a role in determining ontology.

Furthermore, any given scientific theory about an *sich* reality is underdetermined by the sum of evidence at hand. Quine has argued that scientific laws and empirical generalizations always take the form of universal statements (e.g. Kepler's Second Law, that all equal bodies in orbit will

sweep out equal areas in equal times), and that all universal statements are underdetermined by the sum of observations that can be brought to bear on it.¹⁵ Here we see a reason why scientific theories are always changing and adapting: As we look farther and harder at unusual scientific cases and anomalies, our theories need to be changed and restricted to accommodate new observations; our ontology changes with it as well.

What the metajustification says is that coherence, in the long run, is a guide to truth. What Quine has argued is that coherence is a guide to good science -- to prediction and control -- but not the essential nature of the world. What we take the world to be is forever conditioned both by empirical and non-empirical conditions which regulate the way we see the world, hence, ontological relativism is an inevitable and necessary feature of our individual and restricted viewpoints.

Richard Boyd (1983) has extended these antirealist arguments by showing how empirically non-equivalent theories can be "evidentially indistinguishable". His main claim is that all factual knowledge is ultimately grounded in experience (BonJour would agree) and that given all the evidence plus a coherent theory, there is always an alternative theory which can be constructed, which will also be coherent, and which will yield the same predictions using

¹⁵ Ironically, this is the same criticism which was leveled against the verificationists: The problem of making universally quantified scientific laws meaningful.

an alternative ontology. Boyd has successfully argued that ontological relativity can be created even when none historically exists by simply manipulating elements of the theory and using the same observables.

Along these lines, Quine has recently argued that the very idea that something like an *sich* reality is revealed by science is at odds with our best theories. He writes that, "Science ventures its tentative answers in man-made language, but we can ask no better. The very notion of object, or of one and many, is indeed as parochially human as the parts of speech; to ask what reality is really like, however, apart from human categories, is self-stultifying. It is like asking how long the Nile really is, apart from parochial matters of miles of meters....Reference [can] be wildly reinterpreted without violence to evidence." (Quine, 1992, p. 9)

Quine and Boyd have provided compelling reasons why ontology cannot be fixed, even when given a totally coherent epistemology. BonJour has provided no response to these arguments and it is easy to see why: Even his own theory (inasmuch as it is an empirical theory) is subject to Boyd's relativistic tampering. The metajustification is inadequate, as coherency will not fix ontology.

4b. Scientific Revolutions: The social constructivist can extend his challenge to BonJour. The constructivist (like Kuhn) argues that all normal science functions within a *paradigm* and that all scientific and empirical judgements are

essentially *paradigm-dependent*. Terry Christlieb (1986) has pointed out that the paradigm problem is a threat to BonJour's metajustification and, therefore, to his entire theory.

"A paradigm is a general set of background assumptions (usually unarticulated and grounded in a piece of exemplary scientific research) that shapes the methodology employed in subsequent inquiry." (Boyd, et al, 1991, p. 779) These background assumptions define a period of what is called *normal science* in which ontology might look internally as if it is becoming more and more fixed. However, as many historians have pointed out, if one takes a longer look at the history of science, one sees that periods of normal science are regularly broken-up by revolutionary thinking followed by a radical ontological and epistemic shift to a new paradigm of normal science.

Looking at BonJour's theory (particularly the metajustification) one would get the idea that science progresses in a smooth and even fashion, getting closer and closer to a single ontology -- the *an sich* reality -- as science gets more and more coherent.

While this might be the case during some part of normal science, say over a 50 year period, a longer look reveals that science progresses in anything but a smooth and even fashion. Terry Christlieb has argued that this brings the adequacy of the metajustification into question as it does not square well with cognitive practice.

BonJour replies to Christlieb's observations about the potency and extent of scientific revolutions by arguing that

In many of the historical cases which are standardly included under the rubric of "scientific revolutions," the theory or view did not possess a very high degree of coherence and stability, so that its falsehood poses no very serious threat to the claim made in the metajustificatory argument. Second, in cases where this is not so, such as the case of Newtonian mechanics, the overturned theory generally (always?) turns out to have been, in a quite intelligible sense, "approximately true" under a wide range of observational conditions; and the claim of the metajustificatory argument is only that the beliefs in the coherent and stable system will be true "within a reasonable degree of approximation"; it thus seems to me to be a mistake to regard cases of this sort to be counterexamples to the metajustificatory claim. (BonJour, 1986, p. 423)

This is a completely unsatisfactory response for several reasons. First of all, it must be the case that overturned theories have some high degree of coherence and stability to be considered part of the paradigm in the first place. Thomas Kuhn, writing about the process of discovering the anomalies which eventually result in a theory being overturned, writes that "Ordinarily such novelties are far too esoteric and recondite to be noted by the man without a great deal of scientific training." (Kuhn, p. 144)

The process of discovering anomalies and destabilizing the paradigm requires great powers of investigation and a sophisticated background in science. The way BonJour talks about it one might think that paradigms get turned over every day because they lack coherence and stability. This claim is simply not the case.

As for BonJour's claim that scientific theories are only "approximately true" and that all that his metajustification requires is a like degree of approximate truth, I can only say that he is hedging. The example of the overturning of Newtonian mechanics by modern physics is a perfectly good counterexample to his metajustification. The whole point of the metajustification is to provide a guarantee to the agent that her highly coherent beliefs are also true beliefs. Now we see (in an article published one year after SEK) BonJour backing off that requirement and arguing that beliefs only have to have some degree of coherence to be taken as true. This startling inconsistency is quite troubling. Not only does it violate his internalism and epistemic responsibility, it goes in the face of the spirit and letter of the metajustification.

But the situation is even worse for BonJour as his response is not addressed to the real point of the criticism. Christlieb has pointed out that, regardless of the degree of coherence, scientific theories get overturned and ontologies soon follow suit. BonJour's response to this is merely that coherence-to-truth is a matter of degree and that the condition of "absolute certainty" is unrealistically high. This last claim seems reasonable, "certainty" is too difficult a criterion.

But even highly coherent theories get entirely replaced by new theories and new ontologies. Furthermore, the effects

of these new theories and new ontologies on an agent's empirical beliefs is enormous. The underdetermination thesis alone provides compelling reasons to believe that empirical knowledge has more to do with the subject than with the environment in which she functions.¹⁶ The fact of revolutions in science, and hence, in ontologies, should not be surprising. What is surprising is Bonjour's response to this seemingly critical observation.

It is true that his metajustification cannot be squared with a realistic account of the history of science (certainly as an historicist or a social constructivist would see it). More importantly, though, it is true that Bonjour's program as a whole fails to address these important criticisms which go to the heart of any epistemology which claims to be able to hook-up an agent's beliefs with the way the world "really is." The kind of correspondence truth that Bonjour is out to get cannot be guaranteed merely by coherence. Coherence is a relatively easy requirement to maintain, and I think that it is, at best, a necessary requirement for justification in a Bonjourian program. But there must be more.

Clearly, a multiplicity of coherent systems capable of functioning equally well given identical empirical inputs can be created wholecloth and "in the lab," as it were. The

¹⁶ W.V.O. Quine, for example, writes, "The totality of our so-called knowledge or beliefs...is a man-made fabric which impinges on experience only along the edges." (Quine, 1980, p. 42)

history of science provides little assurance that under field conditions anything really changes. What BonJour has shown, at best, is that none of our theories have yet achieved correspondence and truth. "We do not know yet," he might say. The unfortunate implication of this line of criticism is that, if BonJour's program is correct, we will never know -- regardless of long run coherence: There is always going to be an alternative theory and an alternative ontology. Therefore, empirical knowledge is, under BonJour's program, quite impossible. I take it that this is a *reductio ad absurdum* of BonJour's program.

CONCLUSIONS

The four criticisms in the last section call into question the adequacy of the metajustification and the ability of BonJour to really connect truth and coherence. What can we conclude?

There are two possible results. On one hand, the metajustification could be legitimately flawed. It could be the case that the metajustification suffers from criticism because it is simply the wrong metajustification. A different metajustification, still, could connect truth and coherence. I tend to believe that there are alternatives. However, I see no way to modify this metajustification in ways that take account of the criticisms unfounded and still allow the metajustification to do the job it was designed to do.

This leads to the other alternative. It is possible that this metajustification is both flawed and necessary (nothing else could connect truth and coherence). If this is the case then it calls into question the commitments on which the metajustification was founded (i.e. realism and the correspondence theory of truth). If BonJour wants to maintain his brand of coherentism it might very well be impossible to

maintain a correspondence theory of truth, for example. He might then be forced to resort, say, to a pragmatic conception of truth and simply hope that the pragmatic result coheres well with *an sich* reality (if there is such a thing). But that alternative seems incoherent. If he chose that tack, the metajustification would not be necessary at all.

At this point it is impossible to say which alternative is the case. The next step would be to outline a new coherentism utilizing a better metajustification -- one that took the interpretation of scientific theories, doxastic involuntarism, and the demands of epistemic and metaepistemic responsibility to heart.

As Laurence BonJour says himself in the preface to The Structure of Empirical Knowledge, "...there has been too little discussion of [coherentist] views to make it possible to be very confident that there are not other coherentist alternatives yet to be discovered." (BonJour, p. xii)

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