

EXPERIENCE AND JUSTIFICATION: IN SEARCH OF THE EPISTEMIC PINEAL GLAND¹

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It is not difficult to make sense of the idea that beliefs may derive their justification from other beliefs in so far as there is some rational connection between the two. Difficulties surface when, as in certain epistemological theories, one appeals to sensory experiences to give an account of the structure of justification. Thus according to foundationalist theories beliefs depend for their justification on basic beliefs i.e., beliefs which receive their justification from nondoxastic states. The reason why I am justified in believing, for example, that the book on my desk looks red to me is simply the fact that it looks red to me. We typically cease to offer justification in terms of the other beliefs we hold when we reach a basic source. It is precisely this intuition that underlies the postulation of basic beliefs in foundationalist theories. Foundationalism does not require that some beliefs be self-justified or self-justifiable. What it actually requires is that basic beliefs should derive their justification not from other beliefs but from the contents of one's nonpropositional experience.

This helps terminate the regress of reasons but brings into focus the problem of nondoxastic justification i.e., how, for example, my perceptual state of being appeared to redly justifies my belief that there is a red book before me. How could sensory experiences, lacking propositional contents, confer justification on beliefs they give rise to? This has prompted certain philosophers to deny the justificatory role of experience and, thus, reject the foundationalist theories which rely on sensory experiences

¹ I am indebted to Yousuf Aliabadi and Gary Legenhausen for comments on an earlier draft of this paper.

to terminate the regress of reasons.² The following is a typical statement.

The relation between a sensation and a belief cannot be logical, since sensations are not beliefs or other propositional attitudes. What then is the relation? The answer is, I think, obvious: the relation is causal. Sensations cause some beliefs and in *this* sense are the basis or ground of those beliefs. But a causal explanation of a belief does not show how or why the belief is justified.³

The problem, according to these philosophers, is that of seeing how a cause can be transformed into a reason. What, in other words, is that in virtue of which causes come into contact with reasons? This, I shall call, the problem of the epistemic pineal gland. It is the problem of closing the gap between the causal and justificatory roles of experience.

Having briefly explained the problem situation, I shall now proceed to evaluate some of the attempts that have been made to resolve it. Despite their differences, they can be broadly divided into two groups. The first group consists of those theories that try to forge an (epistemic) link between experiential states and the beliefs they cause within an explanatory mechanism (Haack and Moser). The second consists of those theories which try to bridge the gap by locating the experiences and beliefs within some normative paradigm (Millar and Reynolds). Starting with the first group, I begin my discussion with Paul Moser's account of how experience is relevant to the justification of one's beliefs.⁴

² See for example, Davidson, D., "A Coherence Theory of Truth and Knowledge", in LePore, E. (ed.), *Truth and Interpretation*, pp. 307-320 (Blackwell, 1986), Bonjour, L., *The Structure of Empirical Knowledge*, (Harvard, 1985) and Rorty, R., *Philosophy and the Mirror of Nature*, (Princeton University Press, 1980).

³ Davidson, *Ibid*, p. 311.

⁴ Moser, P.K., *Knowledge and Evidence*, (Cambridge, 1991). I have dealt with Susan Haack's account of the justificatory role of experience in another article. See Vahid, H., "Experience and belief: Haack on the problem of empirical basis", *International Studies in the Philosophy of Science*, vol.8, no.2, 1994.

I. Moser: *The Strategy of Experiential Explanationism*

Moser offers a broadly foundationalist account of epistemic justification in which the justification of empirical propositions are ultimately provided by the nonpropositional evidential bases. He defines an epistemic reason to be that which indicates that a proposition is true. On his account an epistemic justifier of a proposition is simply a certain sort of truth indicator, or what he calls an 'evidential probability-maker' for that proposition. Justification requires evidential probability and evidential probability requires unconditional probability-makers i.e., probability-makers (or truth indicators) in and of themselves. But how can unconditional probability-makers, being nonpropositional items, lend any support to a proposition? Moser's initial response is as follows. One's subjective nonconceptual contents, C, can make a proposition, P, evidentially probable to some extent for one, i.e., being an evidential probability-maker for P, in virtue of those contents *being explained for one by P*.⁵

To take account of the rivals of the proposition the notion of *maximal* evidential probability-maker is introduced requiring the proposition P to be a better explanation of C for a person, S, than is every probabilistic competitor for S. So, for example, we might say of my nonconceptual contents consisting of an apparent red book that it is a maximal unconditional probability-maker for the proposition (P) 'There is a red book before me' because (i) I am visually presented with an apparent red book, (ii) P explains the contents of my experience for me decisively better than does every understood contrary and probabilistic competitor for me and (iii) there is no uncontravened contravening regarding (II). I shall now proceed to show that Moser's account of nondoxastic justification fails to show how nonconceptual contents can bear a justificatory relation to the beliefs they cause. For the sake of uniformity and terminological convenience, however, I would continue using the term 'justifier' in place of Moser's 'probability-maker' whenever possible.

According to Moser the nonconceptual content (C) of seeing, say, a red book *justifies* (makes probable) the proposition (P) 'There is a red book before S' because P is the best explanation for S of why C occurs

⁵ Because of the central role that the notion of explanation plays in Moser's theory, he calls his account 'experiential explanationism'.

as it does. I think, however, that there is some confusion here between the two distinct problems of *why* S is justified and *what* justifies him in his belief that P. From the fact that S is justified in believing that P because P is the best explanation of C for S, it does not follow that C justifies P for S. All that can be extracted from such an explanatory argument exploiting the occurrence of C is only whether S can be said to be justified in believing (or knowing) that P. It is completely silent on *what* justifies P for S. To see this point consider the following analogy with "explanation".

According to the so-called deductive-nomological model of explanation, a phenomenon (E) is explained when it is subsumed under a law of nature. The explanandum must, in other words, be a logical consequence of the law and a set of singular statements describing the relevant initial conditions.⁶ For example, from the angle of elevation and the height of a flagpole together with the laws of propagation of light we can deduce the length of a shadow. We may, then, say that the height of the pole explains the length of the shadow. But the deductive-nomological model fails to provide us with a sufficient condition for explanation. The reason being that we can equally derive the height of the pole from the length of the shadow together with the angle of elevation and the propagation laws.⁷ But we cannot obviously speak of the length of the shadow explaining the height of the pole. This is because it is the flagpole that produces the shadow and not vice versa. The argument from the length of the shadow to the height of the pole does not show that the length of the shadow *explains* the height of the pole. It only provides us with a way of coming to *know* (justifiably believe) that the pole is so high. It, thus, has only an epistemic nature.

I believe the same thing is at work in the case of Moser's argument. Here we start from the nonconceptual contents of our experience (C) and the fact that if P had been the case C is what we would expect, to arrive at the conclusion that P was (probably) the case. This argument does not show that C justifies P but only why we can justifiably claim to believe

⁶ Hempel, C and Oppenheim, P., "Studies in the Logic of Explanation", *Philosophy of Science*, Vol. 15 (1948).

⁷ Bromberger, S., "Why-questions", in Colodny, R., (ed), *Mind and Cosmos*, (University of Pittsburgh Press, 1960).

that P, just as the argument from the length of the shadow to the height of the flagpole did not show the former explaining the latter but only how we might come to *know* that the latter is the case. In both arguments the conclusion is an epistemic claim. The most we can explain that way is how we come to know (justifiably believe) that P. Before diagnosing why Moser's argument goes wrong, it would be instructive to take note of some of the absurd consequences of that argument.

To turn the causal basis of a belief into the reasons for holding that belief, Moser, as we have noted, appeals to the fact that the truth of the belief is the best explanation for its basis. Suppose, for example, I come into contact with a red book. This causes some kind of visual experience in me. It also causes a belief, namely, that there is a red book before me. It is obvious that the perceptual belief that there is a red book before me is distinct from a perceptual experience of the same fact. Now Moser argues that because the fact (the proposition) that there is a red book before me is the best explanation of the contents of my perceptual experience (which are available to awareness), the perceptual experience justifies my belief that there is a red book before me. The problem, however, is that this strategy cannot uniquely identify the ground of the belief. For not only my perceptual *experience* of seeing a red book is best explained by the fact that there is a red book before me, the very same fact is also the best explanation of my *belief* (also available to awareness) that there is red book before me. This means that we are equally entitled to conclude that my belief that there is a red book before me justifies my belief that there is a red book before me. Moser's strategy, thus, turns the belief in question into a self-justified one. But the whole idea, given his rejection of self-probable propositional object, was to show that "a proposition's noninferential justification can derive from its relation not to itself, but to the subjective nonconceptual contents of one's experience"⁸.

What has gone wrong? Let us, for the sake of the argument, accept that we can justify certain of our beliefs (about the external world, the past, theoretical entities in science, etc.) through reasoning to the best explanation. But we should be careful about how much we can extract from such inferences. We may, for example, say that our belief in the

⁸ Moser, *Op. Cit.*, P. 144.

external world is justified because positing physical objects can best explain the character and order of our sensations. But to go further and claim that our sensations therefore *justify* our belief that there are physical objects is something which is not warranted by this argument. For, as we just saw, the positing of physical objects is not only the best explanation of our sensations, it is equally the best explanation of our *belief* that there are physical objects. It would, however, be unacceptable to conclude that our belief in the external world is justified by our belief that there are physical objects. Moser's argument, at best, lays down a *necessary* condition for something being a justifier. It stops short of providing a sufficient condition. Consider the following analogy with perception.

The main task of the theories of perception has been to provide necessary and sufficient conditions for picking out the perceived object. It seems perfectly natural to suppose that, in sense perception, the perceived object stands in some causal relation to the perceiver. This plausible assumption led certain theorists to say that it is by virtue of standing in this causal relation that the cognizer perceives the object. The causal link was, thus, thought of as providing a way of picking out the perceived object. The critics were, however, quick to point out that even if this causal link is a necessary condition for perceiving the object, it is certainly not sufficient. For the causal chain leading to sense perception not only includes the perceived object, but also the neurophysiological processes of the cognizer and it is pretty obvious that the latter are not perceived at all. Without further qualifications the causal theory provides, at best, a necessary condition for perception. It fails to pick out the perceived object.

The same point, I believe, applies to Moser's explanationist strategy. Just as a causal connection with the cognizer is a necessary condition for *perception* but fails to pick out the *perceived object*, the explanatory connection of the causal basis with the belief it gives rise to is necessary for the *justification* of that belief but fails to pick out the *justifier*. It may be that the justifier must be capable of playing the kind of role Moser assigns to it, but playing that role is certainly not sufficient for being a justifier. For as we saw, the same mechanism can be used to identify other objects, figuring in the causal chain leading to the belief (about physical objects), as being the justifiers, just as the causal theory led to the identification of other objects, figuring in the (same) causal chain, as being the perceived objects. Moser's explanationist strategy conflates the

necessary and sufficient conditions for being a justifier. It, thus, fails to turn the causal bases into justifying reasons. I shall now turn to a different type of approach to the problem of nondoxastic justification. The strategy is to identify an unquestionably normative process and then show it to be relevantly analogous to the transition from experience to belief. I begin with Alan Millar's account of the justificatory role of experience.⁹

II. *Millar: Quasi-inferential Links between Experience and Belief*

Millar takes inferential justification as his paradigm of how a belief derives its justification and identifies certain conditions on derivatively justified beliefs. He next tries to show that analogous conditions are satisfied in the case of experience-belief transitions (which he calls 'quasi-inferences'), thus, ensuring a justificatory role for experience. Suppose, looking at a red book before you, you come to have a thing having the look of a red book-type experience. Millar claims that since the proposition 'A thing having the look of an F is before oneself' is quasi-inferable from the type of one's current experience and one's (belief) that there are no relevant countervailing facts, one's belief that something having the look of a red book before oneself is justified. This inference, he says, is an introduction pattern which partially characterizes the inferential role of the concept of the look of something.

The main problem with this account is that quasi-inferences are not proper inferences. An experience is not an item that can be true or false. It cannot therefore be regarded as a premise of an argument. Millar's strategy reminds one of what Goldman once tried to do for the causal theory of knowing.¹⁰ Finding it difficult to account for our knowledge of general statements and those reporting the future events, he weakened the causal connection to mere logical connection. Millar seems to be moving in the opposite direction. Starting with logical (inferential) links he is confronted with seemingly justified beliefs that are not inferentially linked to their bases. To accommodate such cases he widens the scope of in-

⁹ Millar, A., *Reason and Experience*, (Oxford University Press, 1991).

¹⁰ Goldman, A., "A Causal Theory of Knowing", *Journal of Philosophy*, 64, 1967.

ferential links to include quasi-inferential links which seem to be, primarily, of a causal sort. He, thus, fails to do justice to the *logical* character of epistemic justification just as Goldman failed to live up to his promise of providing a *causal* theory of knowing. Indeed, quasi-inferential links look very much like the epistemic analogue of the Cartesian pineal gland where causes come into contact with reasons.

III. Reynolds: *Perceptual Practices as Rule-governed Skills*

Let us now consider a different paradigm for showing the normative character of experience-belief transition. This is the rule-following account suggested by Reynolds.¹¹ Instead of inferential transitions, he picks out, as his normative paradigm, the exercise of such skills as playing the piano and speaking a natural language. There is, he thinks, a normative dimension to the exercises of such skills which manifests itself when they are evaluated for correctness. Of course rules for correct performance are rarely stated and in any case the performers usually cannot state them, but we may see the performers' attempts to meet the standards of acceptable performance as a matter of trying to follow the rules. They are not required to have any beliefs about the rules but only to know how to perform correctly and be able to correct their mistakes (in some non-doxastic way). Reynolds claims that the normative character of experience-belief transition can best be explained by analogy with the correctness of the exercises of such skills. When we arrive at our perceptual beliefs, we are, in fact, exercising our recognitional skills i.e., we are responding to experiential situations by forming appropriate sorts of beliefs.

The analogy with skills, however, runs into problems. Reynolds discusses three such problems and suggests some explanations. In what follows I shall try to show that his responses are inadequate and eventually undermine his general strategy. The first disanalogy concerns the difficulty of spelling out rules for the experience-belief transition. Reynolds offers some suggestions as to how our recognitional abilities are

¹¹ Reynolds, S., "Knowing how to believe with justification", *Philosophical Studies*, 64, 1991.

structured. Our skills for arriving at perceptually justified beliefs are actually composed, he says, of lesser skills which can be combined in an unlimited number of ways. Well, I have no quarrel with the idea of breaking the abilities into several other (less complex) abilities, but to describe the use of such abilities in arriving at perceptual judgements as *following rules* is to stretch the concept of a rule. Given Reynolds' analogy with visual recognition programmes for robots, such rules seem to be very much like descriptions of certain mechanisms, in this case, of information-processing systems. If so, there is no reason why we should not equally describe the process of digestion in terms of the following of certain rules.

Another problem sees the analogy with skills as cutting loose the link between justification and truth. Reynolds counters by declining to characterize the epistemic goal in terms of acquiring truth and avoiding falsehood. This goal, he says, can be more plausibly construed in terms of conformity to epistemic rules: "A properly learned recognitional skill is just a skill confirmed by successful actions and (a certain kind of) approval from other members of the community".¹² But doesn't this imply some sort of cultural relativism? We can easily imagine situations in which we properly exercise our skill, receive approval from our community and have no reason to doubt it and yet the belief is unjustified. Reynolds responds by denying that, in such cases, we have properly learned the relevant epistemic norm. Circumstances in which the adoption of epistemic norm does not seem to be justifying, on examination, will be found to "have been *wrongly* influenced, perhaps by religion or politics, and so to have been improperly learned"¹³.

But how are we supposed to distinguish between improper (wrong) and proper influences except by the way they affect the *truth-conducive* character of epistemic norms? Reynolds has no option but to identify improper influences as those that diversely affect exercises of recognitional skills to produce high truth ratio of beliefs. This means that the epistemic goal is, after all, nothing other than believing truly rather than falsely. To call this, not a goal, but "the salient aspect of a causal expla-

¹² *Ibid.*, p. 290.

¹³ *Ibid.*, p. 290.

nation of our adoption of the epistemic norm”¹⁴ seems to me only a shuffling evasion.

The most important difficulty with Reynolds’ account, however, is that while arriving at a perceptual belief seems to be an automatic affair, the exercise of such skills as playing the piano is something that one does. In response, Reynolds points out that an action can be automatic and yet be an instance of the exercise of a normatively governed skill. This is true, he says, of such skills as playing the piano or speaking a language when, with enough practice, the player’s reaching for the correct keys or the speaker’s forming correct sentences becomes completely automatic and, yet, still governed by the relevant rules. This reply, I believe, fails to address what is really at issue here. To see why, let us first have a look at John Pollock’s theory of epistemic norms and see what he has to say about rule-governed practices.¹⁵

Reynolds’ account of the normativity of perceptual practices is derived, as he acknowledges, from Pollock’s theory of epistemic norms. Beliefs are justified, according to Pollock, if they are permitted by epistemic norms which guide our behaviour. He cites, as an example, the following epistemic norm: If something looks red to you and you have no reason for thinking otherwise, then you are permitted to believe it is red. These norms, he says, are like internalized norms for driving a car or riding a bike: “The point here is that norms can govern your behaviour without your having to think about them”¹⁶. The same holds for epistemic norms. Epistemic norms describe an internalized pattern of behaviour that we automatically follow in reasoning.

Despite all their similarities, there is, however, a striking difference which undermines the analogy with rule-governed practices and, thus, dashes any hope of explaining the normativity of experience-belief transition along the lines suggested by Reynolds and Pollock. The idea is that, unlike such rule-governed activities as driving, playing chess, etc.,

¹⁴ *Ibid.*, p. 288.

¹⁵ Pollock, John., *Contemporary Theories of Knowledge*, (Totowa, N.J., Rowman and Littlefield), ch. 5.

¹⁶ *Ibid.*, p. 129.

belief formation is not under one's direct control.¹⁷ When I see a red book lying on the table before me, I have no power at all to refrain from believing that there is a red book before me. There is no way I can inhibit this belief. But this is not the case with rule-governed practices such as playing the piano or driving where "the normative aspect of exercises of skills such as playing the piano or speaking English can be seen as a matter of following rules"¹⁸. It is true that in mastering a skill the subject submits himself to certain rules, but this submission involves no causal compulsion. For it is always possible to refuse to apply or obey the rule. Whether we follow a rule is, in an important sense, up to us and that is part of our understanding of what it is to follow a rule.

This point was repeatedly emphasized by Wittgenstein.¹⁹ He gave the example of a signpost as a paradigm of guidance without compulsion. A signpost is used to guide people along a footpath, but this is not done by forcing them along an invisible set of trails. Of course people have to follow the signs if they want to get to their destination, but this is only another way of saying that they can be said to have followed the signs only if what they do can be counted as following the signs. Whether we follow a rule is, thus, up to us and it is this lack of compulsion that distinguishes such rule-following activities as exercises of skills from the cognitive practices that seem to be out of one's control.

Reynolds comes close to seeing the problem but, unfortunately, formulates it as if it were a problem about the "automaticity" of cognitive practices. He thus invokes the novice/expert distinction for the case of ordinary skills and argues that just as a chess expert may recognize the appropriate move instantaneously and still be said to be following rules, the same would be true of someone who, with enough practice, "can't help but recognize an elm at a glance". But, as was just pointed out, the problem is not whether an automatic practice can properly be described as rule-governed. It is, rather, the fact that while the chess player's moves are voluntary and within his control, the (competent) cognizer

¹⁷ On this problem see Alston, W., "The Deontological Conception of Epistemic Justification", in *Epistemic Justification*, (Cornell University Press, 1989).

¹⁸ Reynolds, *Op. Cit.*, P. 283.

¹⁹ See Baker, G., "Following a Rule: The Basic Themes" in Holtzman and Leich, (eds), *Wittgenstein: To Follow a Rule*, (RKP, 1981).

cannot help but believe that there is an elm before him when he is looking at one. The problem of voluntary control is not something that can be explained away by invoking the novice/expert distinction for it appears at all levels of cognitive behaviour. This undercuts Reynolds' claim that cognitive practices are rule-governed in the sense normal skills are often thought to be and, thus, undermines his claim to have shown the normativity of experience-belief transition.

Conclusion: In Search of the Epistemic Pineal Gland

The quest for bridging the gap between reasons and causes seems to be very much like explaining how mind interacts with body. Descartes saw the world as consisting of two irreducibly different kinds of entity; physical entities and mental entities. The mental and the physical were conceived of having radically different characteristics. Consequently, he found it increasingly difficult to explain how they interact with one another: Where is the place and what is it in virtue of which this interaction is brought about? Descartes eventually identified the pineal gland as the place where the mind directly exercises its functions. He failed, however, to say what it is in virtue of which the mental affects the physical in the pineal gland.

Since then other avenues have been tried. Some philosophers have gone as far as denying the existence of the mental (eliminative materialism). Others have taken a reductive line though they differ in the choice of reductive conditions. The idea is to provide non-mentalistic, reductive, conditions for mental states. The mental is either identified with dispositions to behaviour (Behaviourism) or individuated according to its causal role (Functionalism) or it is simply identified with the relevant brain state (type/type identity theory). There are also those who, despaired of any general reduction, identify each token of a mental state with a token of a physical state (token/token identity theory). A weaker version of this non-reductive account calls only for a supervenience relation between the mental and the physical. What this means is that if two individuals agree in all their physical properties then they agree in all their mental properties. The supervenience thesis calls only for a "determination" relation between these non-reducible states. The idea is to give content to the materialist intuition that the physical determines the mental. Despite their

differences though, all these theories can be seen as trying to locate a proper place, on the conceptual map, where the interaction between the mental and the physical seems more intelligible and less problematic.

I believe we are faced with more or less the same situation when considering the epistemic status of experience-belief transition. Philosophers begin by identifying two distinct, non-reducible, states, namely, experience and the belief it gives rise to. The latter is thought to have a propositional character while the former is regarded as being non-propositional and non-conceptual. Having started with two non-reducible states, they face the dilemma that while experience seems to provide ground for a belief, it is very difficult to see how, being nonpropositional, it can provide epistemic support for something which has a propositional character. Ignoring the eliminative and reductive attempts (motivated, perhaps, by the Quinean idea of naturalizing epistemology and its ultimate rejection of the normative character of justification), we can view other approaches as more or less trying to find the epistemic analogue of the Cartesian pineal gland where causes, it is hoped, come into contact with reasons. Thus both Haack and Moser try to identify some sort of explanatory relation between experience and belief as what turns a causal explanation into an epistemic one, while for Millar and Reynolds the epistemic pineal gland possesses a quasi-inferential or rule-governed nature. There is also the epistemic version of the supervenience theory which seeks to identify an epistemic link between experience and belief without compromising their non-reductive character.²⁰ It argues that since justification supervenes on non-epistemic properties, there must be some non-epistemic states that confer justification.

Supervenience is generally thought to be a relation of determination in the sense that the supervening properties are determined by, or are dependent on, the base properties without entailing the reducibility of the former to the latter. It remains to be shown, however, whether the idea of supervenience can do justice to both these requirements. But this is not my ground of suspicion regarding its coherence as a solution to the problem of nondoxastic justification. We began with the question of what it is in virtue of which that the non-propositional contents of experience

²⁰ Van Cleve, J., "Epistemic Supervenience and the Circle of Belief", *The Monist*, 68 (1985).

provide justification for a belief. The supervenience thesis can be thought of as providing an answer to this question by pointing to the dependence or determination relation between these distinct properties and states. There is, however, a sense in which it transforms the problem it was designed to solve to another level. For we might wonder what it is in virtue of which non-epistemic properties determine epistemic properties. It must be possible to *explain* how such a determination relation is brought about between these fundamentally different kind of properties.²¹ Failing to provide an explanation, we may either resort to the futile attempt of postulating yet another epistemic pineal gland, or simply compromise our initial assumption regarding the non-propositional character of the contents of experience.

Given our non-reductive characterization of the nature of experiential and belief states , it seems obvious that any attempt to find an epistemic pineal gland where causes are transformed into reasons is bound to share the same fate with its Cartesian counterpart.

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²¹ For a similar worry regarding the psychological supervenience see McGinn, C., *The Character of Mind*, p. 30 (OUP, 1982).