Evidence[1]

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I seek in this paper to investigate how best to understand the notion of 'evidence' in an internalist theory of synchronic justification, taking as my main example of the latter Conee and Feldman's theory of 'evidentialism',as expounded in their collection *Evidentialism*. (I refer to this work throughout as 'CF'.) But before concentrating on the notion of evidence itself, I need briefly to analyse the nature of such a theory and the other elements involved therein.

I

I distinguish a synchronically justified belief as one which has good grounds at the time when it is believed, from a diachronically justified belief as one which is not merely synchronically justified but the result of proper practices in the past (for example, results from adequate investigation of the issue.) Like most philosophical theories of justification, Conee and Feldman's theory[2] is a theory of synchronic justification. Alston has argued that, because the various philosophical theories of 'justification' are concerned to analyse different concepts, we should dispense with the very notion of a theory of justification, and talk instead of different 'epistemic desiderata' which beliefs possess. But he recognizes (Alston 2005, 51) that 'truth-conducive' desiderata are 'clearly the most basic'; and so I shall understand epistemic justification as truth-conducive justification, and I shall understand by a belief being (synchronically) justified at a time t as it being at t likely to be true (which I take to be the same as 'probably true' or 'more probable than not').

The common framework for all truth-conducive theories of synchronic justification is as follows: a token belief is justified insofar as it is 'based on' or has grounds which make it probably true; and better justified, the more probable they make it. This framework has been filled out in many different ways according to whether 'based

on' is required or 'has' is enough, and on how 'grounds', 'based on' and 'probably' are understood. Most writers appeal to intuitions about 'justification' which – they claim – suggest that their theory is the true theory of epistemic justification, and rival theories are false. Conee for example claims that certain examples 'make it reasonable to conclude that a belief is epistemically justified only when the believer has cognitive access to evidence that supports the truth of the belief.' (CF, 49). I suggest however that while many of us the word 'justified' in a sense which involves this much of the time, many of us do not use it in such a sense at least some of the time. Only by supposing that there are different senses of 'justified, can we account for the long-standing clash of intuitions between externalists and internalists. The many different theories of 'justification' and in particular of synchronic truth-conducive justification, all have some claim to explicate some ordinary-language use of 'justified'.

There are nevertheless, I suggest, two criteria which must be satisfied by any theory which has a good claim to be a theory of justification. The first criterion is simply that the theory can be spelled out in a coherent way. For example, to spell out reliabilism, the most common form of externalism, in a coherent way requires providing a solution to 'the generality problem' (See CF, chapter 6). The second criterion is that the theory must not have the consequence that most of our obviously true beliefs are quite unjustified. If a theory has the consequence that we are not justified in believing that the world has existed for more than five minutes, that the earth is round, or that my head is not made of sawdust, then it must be ruled out. For these beliefs are obviously true – more obviously true than any theory of epistemology could be – and so (in any sense of 'justified' which explicates ordinary use) well-justified. We shall come in due course to a theory which fails this criterion. The main question to ask about any theory of justification which satisfies these criteria is whether the concept of justification which it provides is one useful in providing philosophical insight (e.g into the extent of the ability of humans to discover truth) or practical help (e.g in acquiring more true and less false beliefs).

An internalist theory is a 'mentalist theory, one that holds that a person's beliefs are justified only by things that are internal to the person's mental life.' (CF,55). A theory is then externalist insofar as it holds that a person's beliefs are justified (at least in part) by things external to a person's mental life. On a natural understanding of the mental, it is that to which the believer has privileged access by introspection. Conee and Feldman distinguish 'mentalism' from what they call 'accessibilism' which holds that beliefs are justified 'by things to which the person has some special sort of access'. They then go on to claim that 'philosophers have not separated mentalism from accessibilism because they have tacitly assumed that the exten-

sions of the two do not differ in any significant way' (CF, 55). But as the special sort of access is presumably the privileged access which one has to one's own mental life, the two theories are necessarily logically equivalent. (My access to my own mental life is privileged in that whatever ways others may have of finding out about my thoughts etc, I can also use – I can study my behaviour on a film or my brain states via instruments and mirrors. But I have a way which only I can use – I learn about my mental life by experiencing it.)

On this understanding of internalism, a believer's grounds for some belief, naturally described as his 'evidence', may include his or her other beliefs (and what I shall call 'inclinations to belief'), sensations, occurrent thoughts, desires, and purposes. I will come to the issue of just which of these should be included in due course. An externalist's grounds for the justification of a belief will typically include the token process of the belief's production – the sense-organ–to-brain-state causal chain, or the more extended nearby–external-state-of-affairs-to-brain-state causal chain; and facts about the proportion of true beliefs produced by a certain type process to which the token process belongs. It may also include other things such as the token process being a type 'designed' (in some sense) to produce true beliefs[3]. A belief being 'based' on its grounds is most naturally understood as the belief being 'caused' (or, more precisely 'causally sustained') by (some of) those grounds; and if a theory involves 'being based on' in this sense, it would seem to be in this respect an externalist theory.

I distinguish three basic kinds of probability – physical, statistical and inductive. Physical probability is a measure of the extent to which nature has a deterministic propensity towards bringing forth events. Statistical probability is a measure of the proportion of events of one type in some class of events of another type. The class may be a class in the actual world, or a class in a possible world – for example, the proportion of heads in a series of tosses of this coin if we were to toss it indefinitely often; or a class in a world in which the laws of nature are very different from our laws. And finally there is inductive probability, which is a measure of the extent to which one proposition makes another one 'probably' (or 'likely to be') true. There is more than one kind of inductive probability. There is subjective probability which is the probability of one proposition on another by the criteria of inductive probability used by a certain person or group. This measure is person-relative, and has as many variants as there are people or groups. But certainly in some cases there are (at least within rough limits) true person-independent criteria for determining the value of the inductive probability of one proposition on another. I call this latter objective kind of inductive probability, 'logical probability'; it has the value which would be ascribed to it on the basis of correct criteria by a logically omniscient being who could

see all the consequences of these criteria. Any objectively true person-independent relation of inductive probability (e.g. that *q* makes *p* probable) which depends on contingent circumstances (e.g. *r*) can be represented as a necessary relation of logical probability (e.g. that (*q* and *r*) make *p* probable).

Almost everyone is prepared to allow that there is an objectively true value of logical probability of *p* on *q* (often symbolized 'P(*p*|*q*)') where *q* entails *p* (that is, 1) or entails *not-p* (that is, 0). And most writers are happy with the idea that the probability of one proposition on another proposition sometimes entails (or puts logical limits, or limits of probabilistic coherence,[4] on) the probability which can be possessed by some third proposition on some fourth proposition. And they are also happy with there being logical relations between assertions of statistical and logical probability – for example that the logical probability of a token belief being true on the evidence that it is produced by a process which produces a proportion ϕ of true beliefs (that is, the statistical probability of a true belief being produced by that process is ϕ) is ϕ – which is roughly the principle which David Lewis (1986, 20) called 'the Principal Principle'. But what many writers deny is that there are what I shall call 'wide criteria' of logical probability, knowable a priori, which allow us to ascribe an objectively true value to any non-probabilistic proposition *p* (e.g. an explanatory hypothesis) on any other non-probabilistic proposition *q* (e.g. a proposition reporting observations). That probability may be either an absolute value, e.g 2/3, or a relative value, e.g greater than the probability of some particular proposition, or a very vague value, e.g 'very improbable'. The consequences of denying that there are such criteria is however that any scientific hypothesis logically compatible with the data is – objectively - just as likely to be true as any other one. Our preference on data available up to the present for General Relativity over a theory which claims that General Relativity holds until the galaxies reach a certain average distance apart (which distance they will reach tomorrow) after which it will be replaced by a universal law of gravitational repulsion, would be merely a subjective preference. The only way to save the view that science reaches true results about which theories are probably true and which are probably false is to acknowledge wide criteria of logical probability[5].

Since humans are unable (at least at present) to work out all the consequences of their criteria of logical probability (e.g for whether the axioms of arithmetic entail Goldbach's conjecture – that every even number is the sum of two prime numbers - or whether they entail its negation, and so whether the probability of Goldbach's conjecture on the axioms is 1 or 0) there seems room also for a third kind of inductive probability. It does look as if Goldbach's conjecture would be probable in some objective sense on the axioms, together

with evidence that it had been found to be true of the first trillion numbers and that an otherwise totally truthful and brilliant mathematician claimed to have proved it. Yet the kind of probability designated by that sense cannot be the sense of logical probability, since the logical probability of the conjecture on the axioms (and so on the axioms plus any other proposition) is either 1 or 0. Loosely, this third kind of probability is probability relative to the inferential abilities of a certain person or group; in my example the group is the human race of the first decade of the twenty first century. To make the notion more precise, we must define it as the logical probability of one proposition on another insofar as this can be determined by a certain limited number of inferential steps following certain rules of inference. I call this kind of inductive probability 'epistemic probability'. (Alas, there is a lack of standard terminology in this area of philosophy, and so different writers use 'epistemic probability' in different senses.) Epistemic probability is rule-and-step-relative, and so will have many variants[6].

The normal form of externalism is reliabilism. A reliabilist's grounds of 'the proportion of true beliefs produced by a certain type process' are grounds of statistical probability. In virtue of the Principal Principle these grounds give a corresponding logical probability to a token of the type being true. An internalist's probability on evidence must be a species of inductive probability. A believer's criteria of subjective probability are clearly internally accessible. In so far as there are true criteria of logical or epistemic probability, they are a priori criteria; and derivable by reflection on thought experiments, and so also internally accessible.

.Some writers give an entirely subjective account of internalist justification, that a belief is justified if it is rendered probable by the subject's own criteria. For example, Richard Foley (1993,79) thinks that we cannot have more than 'egocentric rationality' which 'requires that we have beliefs that are to our own deep intellectual satisfaction' , that is in my terminology 'are subjectively probable'. While an internalist theory in which the 'probability' is subjective yields one kind of justification, and plausibly one worth having, we also need an internalist theory in which the 'probability' is of an objective kind, and so either logical or epistemic probability, which will allow us to distinguish beliefs which are really supported by their evidence from those that are not. For almost all of us believe that science achieves (objectively) probably true results, and it couldn't do that unless there are such objective criteria of probability.

Conee and Feldman, state their theory of 'evidentialism' in one place as the theory that:

> Doxastic attitude *D* toward proposition *p* is epistemically justified for *S* at *t* if and only if having *D* towards *p* fits the evidence *S* has at *t*.

(CF, 83).

So someone's belief is justified at a time iff it fits the evidence they have at that time. Elsewhere they construe a belief 'fitting' the evidence as the evidence making it 'epistemically probable' that the belief is true (CF, 100); but they acknowledge a difficulty in clarifying the notion of 'epistemic probability' (CF, 100 and 305). 'Fitting the evidence' seems however to be regarded by Conee and Feldman as an objective notion, and so naturally to be understood either in terms of 'logical probability' or in terms of a variant of 'epistemic probability' (in my sense). A belief may then be justified by being rendered probable by correct criteria, or by correct criteria applied with a limitation on the rules and steps allowed (and perhaps one obvious limited way in which the probability should be measured is the least limited one the believer can utilize). Ordinary usage could, I suggest, provide plenty of examples of beliefs being said to be 'justified' in virtue of being made probable by evidence in either of these ways.

II

Having analysed the nature of an internalist theory and the other elements involved in it, I come at last to the issue of what the internalist should regard as evidence. In non-philosophical discussion 'evidence' consists of publicly accessible states of affairs, either states actually observed and studied by investigators or ones readily available for such study. But in the context of an internalist theory, it consists only of states accessible to introspection. But which states?

Bonjour has recently revived the classical empiricist project[7] of arguing that our internal sensory states form the evidence which renders probable our beliefs about the physical world. A basic belief is, for Bonjour, one for which there is 'an internally available reason why it is likely to be true that does not depend on any further belief or other cognitive state' (Bonjour 2003, 69). This reason is the content of our sensory 'experiences', which he regards as sense-data; these include patterns of colours in the visual field, and tactual feels, noises, smells and tastes. The fact that a belief seems to characterise accurately the content of that experience (e.g. as a red triangular shape) in my visual field 'provides an entirely adequate basis for thinking that the description is correct' (Bonjour 2003, 74). Bonjour goes on to argue that the ways in which sense data change in line with our kinaesthetic sensations (of apparently changing position) is then best explained by supposing that the sense-data are caused by the physical objects which we ordinarily believe that we perceive.

That is, he claims in effect, the (logically) most probable explanation of the sense-data each of us is currently experiencing is that they are caused by physical objects. All of that might be correct[8], but the only beliefs which would be rendered probable in this way would be each believer's beliefs about the physical objects which he or she is currently perceiving. It would not justify memory beliefs or beliefs derived from testimony (what other people tell us). For our apparent memories are not in general memories of the sense-data we had yesterday, but of the objects we perceived yesterday (when we cannot recall the sense data which accompanied those perceptions). And much of what we believe about the world is derived from our apparent memories of the testimony of others; and these apparent memories of what other people told us are not normally apparent memories of the sounds they uttered but of the propositions they expressed (when we cannot even recall the words, let alone the sounds by which they expressed them). Our current sense-data taken on their own are simply too narrow a base to render inductively probable (on virtually anyone's criteria of subjective probability, let alone – I suggest – the criteria of logical or epistemic probability) beliefs of memory and testimony. Also most of our very general common-sense beliefs which seem to us obviously true – that the world has existed for more than five minutes, that the earth is round, that my head is not made of sawdust, etc – as well as our ordinary beliefs about geography and history, are basic-beliefs in the sense that we do not now hold them because they are rendered probable by any other beliefs (for we cannot now recall how we acquired them), let alone any sense-data. For these reasons a theory which claims (as Bonjour's theory seems to claim) that our sole foundational evidence which renders probable our beliefs is our sense-data fails to satisfy my second criterion above for a possible theory of justification.

So we need a wider base than our present sensory experiences if our normal beliefs about the world are to be justified. Our other mental states include our purposes (what we are trying to achieve), our desires, and our occurrent thoughts; but there is no obvious way of extrapolating from these to the probable state of the physical world. The only way to get from our mental life to the world is to start from our beliefs and inclinations to belief; or rather from those ones which we hold not because they are made probable by other beliefs but because – it seems to us – they are forced upon us by how things are in the world (whether or not we have a sensory awareness of what it is about the world which forces the beliefs upon us).

A person starts with inclinations of different strengths to believe various propositions, insofar as he finds himself with them (because they seem to him forced on him by the world), and not in so far as they are rendered (subjectively on his criteria) probable by other of his beliefs. These are what I shall call the subject's basic propositi-

ons. The strength of an inclination to believe a proposition may be measured by the (subjective) probability which the subject would ascribe to that proposition (if he had the concept of probability) on the evidence merely of his having that inclination; those basic propositions to which he ascribes a probability on this evidence greater than half are his basic-beliefs. Most philosophers seem to ignore the evidential role of inclinations which are not of sufficient strength to constitute beliefs. But such inclinations to believe, when combined with other inclinations or beliefs, can render (on most people's criteria of subjective criteria, and – in my view – on the criteria of logical probability) some belief probable which would not otherwise be probable. If, as I watch the cars passing my window, I catch glimpses of several cars each of which looks as if it might be red, although more probably it is black, and on the basis of each glimpse I ascribe to the proposition that the car in question was red the probability of 1/3, these inclinations together plausibly make it probable overall (more probable than not), in the absence of other evidence, that on at least one occasion a red car passed my window. (In writing in future of our 'basic-beliefs' I should be taken – where it is appropriate – to include our basic 'inclinations to believe', but I shall not always repeat this phrase each time I mention 'basic-beliefs'.) Philosophers also sometimes ignore the point that very strong basic-beliefs give much greater probability to other beliefs than do weaker basic beliefs.

Our ordinary basic-beliefs include beliefs about our present mental states, beliefs about what we are currently perceiving, beliefs about necessary truths (such as that '2+2=4'), and memory beliefs, both particular beliefs (e.g. that I saw a hedgehog yesterday), and general beliefs (e.g. that Marks and Spencer sell good quality food), and beliefs about what others have told us. They also include beliefs which we believe that'everyone knows', e.g. that the earth is spherical and billons of years old (beliefs which we have clearly acquired as a result of teaching or reading or listening to conversations, but the source of which we may not now be able to recall.) In starting from his or her actual basic-beliefs a subject initially holds that they are (subjectively) probably true to the degree to which they seem to him or her to be probably true in the absence of other relevant evidence in the form of other beliefs.

But which basic propositions are we right to take as evidence? I shall understand by a rightly basic proposition a basic proposition to which the believer ascribes that degree of logical probability which is the same as its subjective probability. Thus if he ascribes to some basic proposition a subjective probability of ' as probable as not', it is rightly basic if its logical probability on the evidence that he ascribes to it that degree of probability, is 1/2. My answer to the question is then that all basic propositions about any subject matter are rightly basic[9]; and so all basic-beliefs are rightly basic. Our evi-

dence is the way things seem to us; it is from that that we must start to build our world-view. This is the Principle of Credulity; the rational person is the credulous person; he is right to believe everything he believes as strongly as he believes it until it is rendered improbable by something else he believes . The Principle of Credulity says that the subject should start from where he or she is –doxastically.

The empiricist tradition has sought to claim that only certain kinds of basic-belief are rightly basic. Plantinga (1983, 55-59) interpreted the medievals as claiming that only propositions which are self-evident or evident to the senses are 'properly basic'; and he interpreted the early modern empiricist tradition as claiming that only incorrigible propositions (the extension of which were propositions about sense-data) are 'properly basic'. He combined these two views into a view which he called 'Classical Foundationalism' that 'A proposition *p* is properly basic for a person S if *p* is either self-evident to S or incorrigible for S or evident to the senses of S'. ('The senses' means the five senses.) But, as Plantinga pointed out, this is still too narrow a base to give us our ordinary beliefs. It will only justify our beliefs about presently perceived physical objects, not our beliefs about the past, nor much else including the very general beliefs whose source we cannot now recall. And once all that is included I cannot see any a priori reason for denying evidential status to any logically contingent basic proposition. We do not normally need a priori principles to rule out 'wild' basic-beliefs (beliefs that one has seen fairies, or knows the future from an astrological chart etc.), since a posteriori criteria will normally rule these out. We almost all have theories rendered (subjectively and – I suggest - logically) probable by other basic propositions (including what 'everybody knows' about how the world works) which rule out 'wild' basic propositions from being overall probable. If someone believes that he has seen the Great Pumpkin return at Halloween, then this belief is normally rendered improbable by a lot of other evidence (in the form of his or her basic beliefs or what others have told him or her about their observations). People are obviously right to take into account background evidence where it differs quite a bit from the background evidence we currently have – e.g., when Aristotelian physics was well established, people were right to regard apparent change in the region of the heavens beyond the moon as very probably an illusion (which is why no supernovas were reported in the West before 1500). It is the simplest extrapolation from this to allow that people are always right to amend their basic-beliefs to fit background evidence[10] – unless there are too many strong basic-beliefs inconsistent with that evidence. In that case the theory has to change. It is also the simplest extrapolation from all this, that if there is no background evidence which rules a basic-belief in or out, then it is probably true– but not nearly as probable as it would be if it fitted our background evidence. It fol-

lows that if someone has what we would consider a 'wild' basic belief (e.g a hunch that he is being abducted by alien space travellers), and has no background evidence which renders it improbable, then it is still on balance probable, and so on an internalist theory he is justified in believing it. And this consequence is surely correct, since it can hardly be an a priori truth that there are no fairies, or that astrology is false.

So we should include our basic-beliefs as part of our evidence. Should we include the other elements of the mental life as well – our purposes, desires, occurrent thoughts, and sensations? No, because believers cannot use these things as evidence for anything else, except in virtue of what they believe (true or false) about them. The internalist should construe a subject's evidence as his basic propositions, that is mainly his basic-beliefs; and only his basic propositions[11].

Beliefs, like desires and unlike sensations or occurrent thoughts, are continuing mental states. We have them while we are not thinking about them. Feldman however seems to favour the view (CF, 232) that '*S* has *p* available as evidence at *t* iff *S* is currently thinking of *p*'. But – contrary to Feldman -we should regard all our beliefs, and for a similar reason all our basic propositions and hence our basic-beliefs, as available evidence, since we are (subconsciously) 'aware of' of them (they are not merely 'accessible') even when we are not currently thinking about them. This is shown by the fact that, when we are not thinking about them, they still influence which other beliefs we form and which actions we do; and if asked why we formed a certain belief or did a certain action, we often cite beliefs which we did not consciously think about while forming the former belief or initiating the action. That I have the belief that there is food in the larder is shown by my going to the larder when I want some food, even if it never 'crosses my mind' that there is food in the larder. And so more generally. Any 'belief' which had no affect on a person's actions or other beliefs would not be an belief of theirs at all; and if it does affect their actions and so (at least subconsciously) they are aware of it, it is available to them as evidence and so we can assess the propriety of their response to it. One way in which a belief guides our actions is that it determines what we say spontaneously when we seek to answer questions honestly. (The spontaneity of an answer is very strong evidence – but no more than that - that the belief is already there, before the question is asked. Feldman is however right to reject the view that anything would be evidence now just because we could recall it easily, since we can sometimes easily recall what we have currently forgotten.) Feldman ends his discussion of this issue (CF,239) by showing some sympathy for a wider understanding of which beliefs can constitute evidence. He allows that we have 'operative' background beliefs, 'beliefs that are playing an active role in sustaining one's current state' of the beliefs currently

being thought about. But, I am suggesting, the grounds for attributing available 'operative' beliefs to people are much wider than that [11]. Everything which I have just written about beliefs applies for similar reasons to all basic propositions and so to basic-beliefs (even when they don't become beliefs.)

So I suggest that Conee and Feldman's 'evidentialism' should be spelled out by understanding a subject's 'evidence' as the collection of the subject's basic-beliefs (and other basic propositions), while their 'fitting the evidence' should be understood either as 'made logically probable by the evidence' or as 'made epistemically probable [on a certain variant of 'epistemic probability' in my sense] by the evidence'. Clearly, on the assumption that there are wide criteria of logical probability and that one of these criteria is that basic propositions are probable insofar as they are believed, it is an instrumentally good thing for a person to have a belief B rendered logically probable by their evidence. For this very fact means that it is probable to a significant degree (varying with the probability of the evidence and the probability that it confers on B) that B is true – and true beliefs are a good thing to have. And it would be the next best thing to have a belief rendered epistemically probable (on any variant of this, and in particular on the least limited variant of this concept the subject can utilize) by the evidence.

But it would be better if the believer's belief is 'based on' the evidence, and Conee and Feldman define a second concept (additional to the concept of being 'justified') of a doxastic attitude being 'well founded' (CF,93) which involves both the belief being justified and also being based on the justifying evidence. They see the 'epistemic merit' of a belief being based on the evidence as the believer 'appreciating' the evidence (CF,93n22). This presumably amounts to the believer recognizing the probabilistic force of the evidence. That is an internalist notion, and 'well foundedness' so understood remains an internalist concept, and surely has an intrinsic value greater than that of mere justification. For it involves the believer being aware of the application of a very important a priori concept of objective inductive probability. But it seems clear (despite CF 93n22) that one can in this sense 'appreciate' the evidence for a belief even if that belief is not caused by that appreciation; it might be caused by totally irrational factors. Yet it would be intrinsically more valuable if the belief is caused by the subject recognizing its probabilistic force. For then the believer does not merely have a true belief about inductive probability, but is guided by it in his formation of other beliefs, and that makes for significantly greater sensitivity to the a priori . Thereby the believer manifests that scientific rationality which contributes to the intrinsic worth of humans (and to a lesser extent, animals). On this understanding 'well foundedness' involves an externalist element. In these various senses of being 'epistemically justified'

and being 'well founded' which can be developed from Conee and Feldman's account, it is good to have beliefs which have these features.

NOTES

1. Much of this paper is based on my book *Epistemic Justification* (Swinburne, 2001), especially ch 5.

2. 'Evidentialism is best seen as a theory about synchronic rationality' – Conee and Feldman, 2004, 189.

3. One of Plantinga's (1993) criteria for a belief being 'warranted' (that is, having a particular kind of justification is that the belief is produced by a 'creator', 'according to a design plan aimed at the production of true beliefs' (Plantinga 1993,194).

4. A set of probability judgements is coherent if it is not inconsistent with the normal axioms of the probability calculus. For different accounts of why probability judgments should so conform (including the standard 'Dutch book' argument), see Howson and Urbach (1993), chapter 5.

5. For my own account of what these criteria are see my *Epistemic Justification*, ch. 4.

6 For first work on systematizing 'epistemic probability' (in my sense) see the description of Daniel Garber's 'local Bayesianism' and Richard Jeffrey's pioneer suggestions in my *Epistemic Justification*, Additional Note E.

7. Bonjour himself refers to Locke, Berkeley, Broad and Price as contributes so this project. See his 2003, 86.

8. It is of course open to the objection that it assumes 'the myth of the given', that is that any description of the contents of our mental life will be in terms of its normal cause in or some other relation to the public world, and so already presupposes various features of the public world and thus cannot be used without circularity as evidence for these features. See Sellars 1963. Bonjour responds to this objection in various places in Bonjour, 2003.

9. My use of 'rightly basic' is similar to Plantinga's use of 'properly basic' (see his 1983, 55-9). But I use a different phrase in order not to be thought to endorse Plantinga's view that a belief being properly basic may arise from it having non-doxastic grounds (mental grounds other than beliefs) of a right kind. (See his 1983, 78-82).

10 . I am writing 'basic-belief' rather than 'basic belief', as is normal, in order to draw attention to the point that a basic-belief may ultimately be regarded by a subject as improbable in the light of further evidence, and then it will not be a belief of the subject at all. An extreme case of this is amending a basic-belief in the light of itself. A basic-belief which entails that it is true in any logically possible circumstances will have a logical probability of 1on any evidence or none; and one which entails that it is true in no possible circumstances will have a probability of 0. A subject who amends in accord with correct criteria will therefore regard a belief of the former kind as certain, and no longer believe the latter.

11.Conee and Feldman typically construe one's evidence as consisting of 'experi-

ences'. Conee holds that 'experiences need not either consist of beliefs or be a topic of beliefs' (CF,43), which entails that things other than beliefs (presumably sense-data) can function as evidence. He also holds that 'it would not be most reasonable to assume that only sensory events are foundational' (CF,43n16). He allows that 'sensory awareness' might consist 'apprehending certain propositions' (CF40n6), albeit ones of a very narrow kind, and such apprehension would presumbably involve belief.

12. Another restriction on the beliefs which can count on evidence has been proposed by Williamson: 'knowledge, and only knowledge, constitutes evidence' (2000, 185). Williamson acknowledges (with qualifications arising from what he regards as the unclarity of the notion of the belief) that knowledge entails belief; and since clearly knowing *p* entails that *p* is true, this has the consequence that only true beliefs can constitute evidence. And of course something else – which Plantinga calls 'warrant' is required for a true belief to constitute knowledge, though Williamson does not think that this can be analysed. But our 'evidence' is for Williamson a public matter; and since the truth of a proposition about the physical world depends on how things are in that world and that is something about which we can always be mistaken, it follows that 'we are not always in a position to know what our evidence is' (2000, 190). That makes Williamson's theory (in this respect) externalist, and so beyond the scope of this paper. Nevertheless Williamson's theory still has the problem of accounting for beliefs which are made (in some inductive sense) very probable by conjunctions of pieces of uncertain evidence – as in my example of the cars. In such cases Williamson will need to say that it is an item of knowledge that certain propositions have certain probabilities, e.g that there was a probability of 1/3 for each of the cars that it was red. But to allow that sort of knowledge to function as evidence seems contrary to the spirit of Williamson's project – see his (2000, 193).

BIBLIOGRAPHY

Alston, William P., 1989 *Epistemic Justification*, Cornell University Press.

Bonjour, L. 'A version of Internalist Foundationalism' in Bonjour L. and Sosa, E., 2003, *Epistemic Justification*, Blackwell.

Conee, Earl and Feldman, Richard, 2004 *Evidentialism*, Clarendon Press, 2004. (I refer to this work throughout the present paper as 'CF'.)

Foley, Richard, 1993, *Working Without a Net*, Oxford University Press.

Howson, C. and Urback, P., 1993: *Scientific Reasoning,* second edition, Chicago:

Open Court.

Lewis, David, 1986, 'A subjectivist's Guide to Objective Chance' in his Philosophical Papers Vol, II, Oxford University Press.

Plantinga, Alvin I., 1983, 'Reason and Belief in God' in A. Plantinga and N. Wolterstorff (eds.) *Faith and Rationality*, Notre Dame University Press.

Plantinga, Alvin I., 1993,*Warrant and Proper Function*, Oxford University Press.

Sellars, Wilfrid, 1963, 'Empiricism and the Philosophy of Mind', ch 5 of his *Science, Perception, and Reality*, Routledge and Kegan Paul

Swinburne, Richard, 2001, *Epistemic Justification*, Clarendon Press.

Williamson, Timothy, 2000, *Knowledge and its Limits*, Oxford University Press.