

Reformulating the Two Aspects of Justification

In *Evidence and Inquiry* Susan Haack presents a dual-aspect account of justification in which casual states and relations, as well as logical propositions and relations, play a necessary factor. The present paper reformulates how these two aspects fit together to form a comprehensive picture of justification. The account offered here is an account of justification, and more specifically, what we can call *discursive justification*. My question is not simply a question of how our beliefs are justified, but of how we, the believers, could actively justify them in discursive practice. In other words, I am concerned with the question of how we could attest to the fact that the things we claim to know are, in fact, true. Haack's account is an account of *evidence*, not justification, and so, though the two notions are very closely related, our approaches are quite different. Nevertheless, I will employ her state/content distinction, and I will also focus a significant portion of this paper on an addition to her crossword puzzle metaphor.

1. Some New Distinctions

I want to implement the same state/content distinction that Haack does, but I think that a change in terminology can clear up some confusion. Haack makes the distinction between the “state and content senses of ‘belief’”. She introduces the terms S-belief and C-belief to make this distinction between “someone believes something and what they believe.”¹ Talking of state and content beliefs as two senses of belief seems to me to paint a misleading picture. It seems much more intuitive and clear to me to, rather than speaking of state and content *senses* of belief, to speak of state and content *aspects* of belief. We can say then that all beliefs have both an S-aspect and a C-aspect. One aspect of a belief is the mental state that a believer is in which is causally effected by events in the world and affects behavior. The other aspect is the content, which can be expressed propositionally and which the belief-state can be said to represent or mark a commitment to.

¹ Susan Haack. *Evidence and Inquiry*. Prometheus Books: (1993). p. 118.

My methodology for explaining my reformulated dual-aspect theory is to start from two sorts of *justification* that one can offer for a belief: one which latches onto the propositional content of that belief (the C-aspect), and one which makes reference to the physical state of that belief (the S-aspect). Focusing on content and state *justification* as opposed to content and state *evidence* (as Haack does) allows us keep the account here centrally in terms of how our web of beliefs is to be justified without having to worry about the issue of warrant, which isn't necessarily justificatory, determining which states or not are evidential, beforehand.

When asked to justify a claim or belief, the standard strategy is to show how that claim can be inferred from a different claim (or set of claims) that does not need to be justified (at least not at that present situation). This is usually how a defense of a claim will work in the situations that first come to mind, such as scientific or political issues that are called into question by another person. I claim X, someone challenges X, and I go back to P, which is unchallenged at that point, and show how, from P, X can be inferred. If I am defending a scientific claim, for example, my task is to show how the claim in question can be inferred from experimental evidence or some other scientific claim that both my challenger and I agree upon. If I am successful in showing how the inference can be made, then my challenger must either change her initial position of agreement with regard to the experimental evidence, or rescind her challenge of my belief. In this standard sense, what is being called into question is the way the C-aspect of the belief stands in relation to the C-aspect of related beliefs. The justification here is an appeal to the way the content of the belief in question, expressed propositionally, stands in logical relation to other propositions which we take to be true. This sort of justification, we can call, using the same terminology a C-justification.

Instead of looking at the relation between the propositional content of a belief and the contents of other beliefs, we can alternately look at the situation in which a given belief is produced, the environment and the faculties producing it, and say that the belief is justified if a true belief is

likely to come about in such a situation. This sort of justification rests on the fact that we are physical organisms in a physical world and there are causal factors that go into belief-production. A certain state of the world will reliably cause a belief state with a certain true content that goes along with that state. It is still the C-aspect of the belief getting justified here. Belief-states *themselves* do not get justified because it only makes sense to justify something with propositional form. However, in this sort of justification, the C-aspect of the belief is not being tied to related contents, but tied to its related S-aspect, and this S-aspect is in turn being tied, causally, to other states in the world. A justification a belief which follows roughly along these lines, I will call an S-justification.

Traditionally, the internalist theories of justification paradigmatic of the epistemological tradition have dealt primarily with C-justifications. Classical foundationalist theories, starting with the Cartesian project, have started with belief-contents that they took as indubitable and concerned themselves with how the contents of other beliefs could be inferred from those foundations. Coherentist theories have concerned themselves not with a one-way justification of contents, but how the set of belief-contents as a whole fit together. The psychological or physiological S-aspect of the beliefs in question and the causal story of belief-production have traditionally not played a central role in such internalist theories of justification.

On the other hand, S-justifications, which tie the truth of a belief with causal factors regarding its production and the environment in which it is produced, is primarily what externalist theories of knowledge have latched onto. The most widely acknowledged of these externalist theories is Alvin Goldman's reliabilism, but Alvin Plantinga's Proper-function account of warrant is also a good example, and one I will refer to throughout this paper as my model of how an S-justification might go. The general principle behind the account can be put as follows: If you're designed such that in situation S you produce true belief P, then if you are in situation S and produce true belief P, and you're working in the way that you're designed (if you're not broken in some

relevant way), then you know P². To play the role of S-justification, my view employs a naturalized version of Plantinga's account where "designed" can mean designed by evolution, or, and more centrally for the present view, *designed by a specific community by conditioning through language-learning or special training*.

Although an externalist element will be an important aspect of this account, the overarching structure of my account here is internalist. The only factors that can function into justification here are factors of which the justifier is aware. Because my project attempts to show how we could discursively justify our own beliefs, this awareness is necessary. I am not trying to answer the question "What are the necessary and sufficient for knowledge in general?" Perhaps it could be the case that one can have knowledge even when she is not in a position to attest to having such knowledge herself, as externalist theories claim, but that is not of much concern to me here. My account of justification here, because it will include S-justification as a central aspect, will incorporate paradigmatically externalist factors, such as causal relations outside of a belief, and I will be tentatively adopting an account formulated as an externalist one (Alvin Plantinga's proper-functionalism), but insofar as I am incorporated them as an aspect of a theory of justification, the externalism I will employ here is an *internalized externalism*.

2. Indispensability and Interconnectedness of S and C-Justification

One of my central claims is that only together can S-justifications and C-justifications provide a satisfactory account of empirical justification. First, why is S-justification indispensable? Couldn't we justify all of our beliefs on logical grounds, as opposed to appealing to the causal factors involved in the production of our beliefs? I don't think we could. It seems clear to me that a causal component is a necessary addition to the logical component of justification.

² Alvin Plantinga, *Warrant and Proper Function*. Oxford University Press: (1993).

We are physical animals living on a physical world. We form our beliefs in response to the physical events in the world that leave an imprint on our sense organs. Without making explicit note of this connection between our beliefs and the world, our epistemological picture would have no contact with the world. The events in the world impact us. In the way most relevant for our present purposes, they affect the state of our sensory systems. We have evolved and been trained or conditioned to form certain beliefs when certain events or objects, detectable by our sense organs, are present in the world. In this way, our belief states, the S-aspect of our beliefs, are connected to the world. It is the S-aspect of belief alone that makes this connection, and the causal S-justification which latches onto the physical state of the belief, and ultimately ties it to the events in the world that we want to talk about. It is this causal connection that a belief with the content “X” has with X, which ensures that the arising of a belief with content “X” is a good indicator that X actually is the case. Without this causal link, no epistemological picture can be complete. It would be a picture where our beliefs would be floating, unconnected to the world or the things our beliefs are about.³

If our S-justified beliefs can go on to C-justify other beliefs, our theoretical commitments will be tied to the world. This is the first direction of justification, where we make the move from state-justified beliefs to content-justifications, and I will explain, with reference to Quine, how this can go in the next section of this paper. But why do we need C-justifications in the first place? Why can't we just tie all of our beliefs, inferential or not, to the world with S-justifications which state the reliability of the properly-functioning belief forming mechanisms without ever having to worry about C-justification? Perhaps if our issue was that of warrant, we could do this. But my present concern is that of justification, and so we must have a way of attesting to the fact the noninferential beliefs that we have been conditioned to produce in response to external stimuli, are, in fact *the right*

³ At least for beliefs about contingent matters. I'm holding off judgment about what we could say here with regard to a priori knowledge (if there is any).

beliefs. An S-justification can only be a good S-justification with the condition that one is designed to produce the belief “P” in situation S, and, in situation S, “P” is true. We are conditioned to respond to stimuli with the production of beliefs, but this conditioning is done in accordance with what a linguistic community takes to be the right set of beliefs, and there needs to be a way to show that these beliefs are good ones. Attesting to the fact that these are in fact the right beliefs cannot simply be done with more S-justifications, but requires an inferential C-justification.

The second direction, where the move is made from C-justified beliefs to new S-justifications, provides the way in which our knowledge grows and is revised. Our web of beliefs, tied together with broadly logical relations, can form the backdrop of knowledge by way of which we can be conditioned (through ordinary language learning in the standard case or through special training in a scientific community) to reliably and noninferentially form new beliefs. New S-justified noninferential beliefs arise out of what was once inferential and contested C-justifications. In this way, our knowledge can grow. We also can *revise* our previously S-justified noninferential beliefs by subjecting them to C-justification. The latter portion of this paper will provide a sketch of how this works.

3. The First Direction: State-Justified Beliefs to Content-Justifications

How are our beliefs connected with the world? To answer this question, we need way to tie together both propositional content of an observation or belief (the inferential force of a belief or observation) and empirical state of that observation or belief (the causally affected aspect of a belief or observation). I will start from Quine’s later epistemological work, and show how, in conjunction with a component of causal S-justification, S-justified beliefs, connected with the world, can go on to inferentially C-justify theoretical beliefs, and, in this way, connect theory to the world.

A “bridge” is not a particularly apt metaphor for my Quinian picture, and it is a metaphor that Quine aims to move away from⁴. Rather than a bridge, what we need, if we are to employ a different metaphor is a *fulcrum*, a point in which an epistemologist can identify the transition from causal physical factors to inferential ones. Quine illustrates just how such a state/content fulcrum can work with his talk of the “observation sentence,” an occasion sentence that all members of a linguistic community can agree outright upon when witnessing the occasion. If we think of the “observation sentence” as a holophrastic noise, rather than in terms of the meanings of the words it employs, we can see it as something to which we are conditioned to assent to outright when certain sensory stimulation is present. In this way it is casually connected (and reliably connected through conditioning to the physical events in the world. However, if we think of the sentence term by term, it connects logically to theory. For this reason, Quine calls the observation sentence “Janus-faced.”⁵

It may seem that this Quinian strategy of focusing on linguistic items and their connection to purely physiological states precludes any serious talk of the role of experience or perception in justification. If that is the case, then Quine’s method is pretty far removed from Haack’s. I don’t think it need be however. Taking the “observation sentence” for the role of this state/content fulcrum, as opposed to say, a noninferential experiential/perceptual state or belief, is not epistemologically essential. What is essential is that this fulcrum does not require an explicit inference to (and can be causally connected directly to the world in a way that we have some sort of understanding of), but that it is something *from which* one can make an explicit inference. This is why I have described it as a fulcrum; it is a point that marks the transfer, the shift in weight, from causal factors to logical ones.

⁴ W. V. Quine. “In Praise of Observations Sentences.” *The Journal of Philosophy*: (1993). p 110.

⁵ “In Praise of Observation Sentences.” p. 109.

Quine explicitly avoids serious talk of conscious experience or experiential beliefs because he is afraid that this sort of “experience” is in some sense not naturalistic. His insistence on putting things physiologically, he tells us, “was of a piece with [his] naturalism, [his] rejection of a first philosophy underlying science.”⁶ But it seems to be unrepresentative of the science of psychology to think that perceptual experience is not an aspect of scientific theory. There are all sorts of tests conducted in cognitive psychology which provide legitimate scientific insight into the way we experience the world, the heuristics that factor into our everyday experience, and how we can manipulate this experience. Considering how experience is treated in psychology, it is not clear that there is a no place for experience in science, and so it may be the case that it can be included in a naturalistic metaphysics.⁷ It seems to me that conscious experience is too central to the way we think about the way our beliefs are justified to leave out of an epistemological account. Our explicitly conscious experiential states seem to be the paradigm case of non-inferential knowledge⁸. I think this sort of experience, as opposed to something like an observation sentence, can serve as a commonsensical epistemological fulcrum.

Now, taking my caution from Quine, and proceeding, I want to be very careful about what I mean by experience. I don’t mean anything like an array of uninterpreted “qualia” present to our consciousness. The contents of experience in the sense I am using it, are fully theory-laden. The experience we have is full of all the objects and events that we see in the world. We experience things like tables and chairs, and, if we have enough training, even things like viruses and electrons in the right situations. Like Haack, I maintain that perception is “of things and events around one,

⁶ W.V. Quine. *Theories and Things*. Harvard University Press: (1981) p. 40.

⁷ This is a rather hefty point, and making a convincing case for it requires more space and resources than presently available, but I will continue showing how experience could play the same role as the observation sentence with this as my underlying assumption.

⁸ For my present purposes here, I do not intent to make a strong distinction between “experiential state” (an experiential state that one is explicitly conscious of is what I mean here) and “experiential belief”. The reason for this is that I don’t think it is a particularly easy distinction to make (if there is a distinction to be made at all), and both “experiential belief” and “experiential state” can serve the same function in this account.

not of sense-data, color patches, or whatever. But at the same time it allows for the pervasive interpenetration of background beliefs into our beliefs about what we see, hear, etc.”⁹ When Quine writes, “Our typical sentences are about bodies and substances, assumed or known in varying degrees, out in the world. Typically they are not about sense data or experiences . . .”¹⁰ he is certainly not thinking of the sort of experience that Haack and I endorse. If the contents of our experience *include* the “bodies and substances, assumed or known in varying degrees” and correspond with what our typical observation sentences are, as is the case on my account, it seems that experience could play a very central role in a Quinian account.

A certain experiential or perceptual state is both a physical, psychological state, which can be causally connected, in conjunction with particular training or conditioning, directly to sensory or neural stimulation and to objects in the world. An experiential state also has a certain content, which can perhaps be articulated in terms of a set of observation sentences (drawing the tie even closer to Quine’s). Because of these two aspects, experience is just as “Janus-faced” as Quine’s observation sentences. If we think of the content of the experience is tied to its *psychological state*, we can look at the causal relations between that experiential state and the objects in the world and causally S-justify its truthfulness. If we think of the how the content of an experiential state, expressed propositionally, we can treat it as a set of propositions (a set of observation sentences) about the world that can factor into a logical, inferential C-justification¹¹.

A causal S-justification roots the experiential content causally to the world. This causal path that we recognize in our justification as connecting the propositional content “X” with the event X, moves from X, the event happening, through the stimulation of the sensory receptors (as Quine

⁹ *Evidence and Inquiry*, 158

¹⁰ W.V. Quine. *Theories and Things*, 40

¹¹ If one is skeptical that the content of experience can be expressed propositionally, it must be noted that if we are saying that experience is something which one can use as the basis of inference, there must be some way in which we can say this about its content. Since it seems like we infer from our experience all the time, it seems that there must be some way in which we can express its content propositionally.

rightly notes), and to the experiential state with content “X”. Without an S-justification of the truthfulness of the content of an experiential state, we have no reason to rely on experience to justify our inferences. Inferential justification has to stop somewhere, and it must make a connection to the world where it stops. If we stop at experience (which, as the paradigm case of non-inferential knowledge, seems like a good place to stop) we need to put the content of the experience in truthful connection with the world with an S-justification. Since externalist justifications have addressed the issue of S-justification in detail, we can adopt an already formulated externalist account to play this role of S-justification that we have made explicit. Quine does not do this, but, since sophisticated externalist accounts are already formulated, and employing one would be a good addition to the present view. An in-depth attempt to incorporate a detailed account of S-justification into this picture I am sketching is beyond the scope of this paper, but if my strategy is to be pursued further, it would be necessary to incorporate such an account.

4. The Second Direction: Content-Justified Beliefs to State-Justification

In Plantinga’s account of proper function, an essential element is that the design plan be a *good one*. That is, the cognitive faculties have to have been designed, and designed well, to produce *true* beliefs. On a naturalized account, this is quite a big issue that must be dealt with. An S-justification can only do any justifying work if the justifier knows that the causal relations involved lead to *truth*. But if our experiential beliefs provide the basis for our inferences, *how can we have the knowledge necessary to S-justify them?* It seems like we have stepped right back into the epistemic regress problem that Plantinga’s account strives to avoid. But, because of this second direction, we haven’t.

Even though our S-justified noninferential beliefs ground us to the world, it doesn’t mean they can’t be tested by being thrown into the logical web of beliefs themselves; it just means that if we do this we need a different foothold for the time being. An observational belief can be called into question on logical grounds, requiring a C-justification rather than its usual S-justification, if

different beliefs in the belief web call for it to be challenged. Consider a Kuhnian revolution in which, because a whole set of background beliefs change, basic observational beliefs must change as well. This encourages Kuhn to make the claim the basic experience of scientists changes with paradigm change¹². Even if we are taking experience to be the grounding aspect of our epistemology (connected to the world through an S-justification), this isn't necessarily epistemologically problematic; it merely means that scientists can't use *that* observational belief as a grounding foothold at that time. This is exactly the point Sellars makes when he says, "For empirical knowledge, like its sophisticated extension, science, is rational, not because it has a *foundation*, but because it is a self-correcting enterprise which can put *any* claim in jeopardy, though not *all* at once."¹³ The ground of our justifications is not a "foundation" which gives us an unshakable, indubitable ground for our inferences; it ideally only provides the best conjunction of security and informativity with respect to our belief-structure.

Our experience is conditioned to fit with the best set of beliefs that we have at the moment, the set of beliefs which we think are most likely to be true. If we have reason to change this set, we can learn to see the world differently, and, though at first correct observation may require some thought and inference, eventually our immediate experience becomes filtered through the correct set of beliefs. Imagine a child who learns the word "fish," and recognizes any swimming animal with flippers as a fish. He then sees a whale and calls it "fish," and, though this recognition may have corresponded to some set of beliefs at some point in history (perhaps before sufficiently developed biology), the best set of beliefs, the one most internally and externally consistent, that we have now classifies this animal as a "whale" which is not a fish but a mammal. So, though it may take some errors and extra thought at first, eventually basic experience becomes conditioned (with the help of

¹² Thomas Kuhn. *The Structure of Scientific Revolutions*. University of Chicago Press: (1962).

¹³ Wilfrid Sellars. *Empiricism and the Philosophy of Mind*. Harvard University Press: (1997). p. 78.

his parents) to this set of beliefs. Our experience gets no more basic than the sort of experience which includes things like “fish”, and there is no epistemological foundation more theory-neutral than our everyday basic experience which includes all sorts of these judgments. This is unproblematic, however, insofar as we note that experience is not independent of our understanding of the world, and so the way we experience the world is constantly reflecting a more comprehensive and empirically adequate set of beliefs.

Using C-justifications to revise which beliefs are to be S-justified, a growing understanding due to C-justifications expands the scope of our S-justified noninferential beliefs. The complexity and informativity of our experience grows as we acquire a new theoretical understanding of the world. What we have once inferred to from an experience formed by a less theoretical worldview, now provides the new bundle of background beliefs that go into a new experiencing of the world. The sort of theoretical commitments that once been at the forefront of research now form the filter through which one sees the world and forms new theoretical commitments.

It is central to this account that experience (or whatever other noninferential belief-type plays the role of state/content fulcrum) can change, grow, and be revised. Our beliefs are connected to the world at various points, and we can be aware of the causal connection at these points, but the points at which we connect our beliefs with the world change as our belief-set changes. It should be clear now that neither S-justifications nor C-justifications have any justificatory power alone. Without underlying S-justifications, C-justifications are unconnected to the world, and without C-justifications, there is no way of knowing that the *most secure* beliefs are being S-justified. Only together can the two sorts of justification provide us with the tools to justify our scientific and everyday world-view.

Appendix: An Addition to a Metaphor

Haack's key metaphor in articulating her foundherentist position is a crossword puzzle. The entries depend on the clues (experiential evidence), but also how well they fit together with the other entries (background beliefs), and how secure those entries are¹⁴. As useful as this metaphor is, it only illuminates justification of our beliefs which latches onto their C-aspect. Haack would probably agree here and say that the crossword analogy is just an analogy. It serves to point us in the right direction, not to give a complete picture. But I think the analogy can be extended with very important results if we think more closely about what we mean by the "clues" in the crossword puzzle. I want to say that the clues are not the numbered ink markings on the page themselves, but the *meanings* of those markings. We can only know the clues if we know how to read the marks on the page.

In the modified version of the metaphor I am proposing, the actual ink markings that compose the clues on the page are analogous to some sort of physical event in the world which bears causal relations to a given experience and the objects in the world. The meanings of the clues, that the subject understands when she knows the language in which the crossword puzzle is analogous to her experience she has when such physical events occur (such as her undergoing a certain sensory stimulation). If the clues of the crossword puzzle are written in Russian, then, since I don't speak Russian, the clues will be of little help for me. In one sense, it may seem that I have the same clues as a native Russian speaker, in that the same ink markings are before me. But, there is another sense in which I don't really *get* the clue, because I can't read what they are saying. Analogously, if I receive the sensory stimulation of an electron interference pattern through spectroscopy image, then I will have the same sensory stimulation as a scientist trained to look at such images, but I, since I don't have the training required to understand such images, I will not

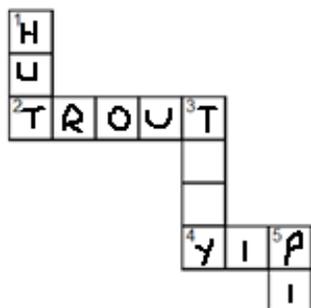
¹⁴ *Evidence and Inquiry*. p. 126.

have the same experience. And so whereas a scientist's experiential belief, something like "the electrons are doing such and such," will be relevant to making a theoretical conclusion, my experiential belief, which will be limited to something like, "there are blue splotches," will not be theoretically relevant.

To repeat, the ink markings which compose the clues are analogous to the sensory stimulation that arises under certain physical conditions, the neural intake, or any other physical state to which we can causally tie our experience and to the world. The clues (in a particular language, with a particular meaning) that one can get if she knows how to read the ink markings on the page are analogous experiential states which (if one has the right sort of background and training) are triggered by certain sensory stimulation the content of which can serve as a basis for making theoretical inferences. The reading of a certain clue is S-justified by language learning, and the belief that a certain entry is correct is C-justified, both by inference from the clue and coherence with other entries. Suppose the crossword we are solving is a fairly straightforward one, where the clues aren't tricks or plays on words of some sort. The implicit assumption that the solver has faculties which allow her reliably draw the clue from the marking on the page underlies this sort of puzzle solving. To the question, "How do you know those marks mean what you think they do?" the answer is simply, "because I know English."

In Haack's original crossword metaphor formulation she says that "the clues don't depend on the entries."¹⁵ However, in my reformulation of the metaphor, where the clues are the *meanings* gleaned from reading the ink markings on the page and not the ink markings themselves, this is a serious possibility, and it is a possibility which provides an analogue to the sort of top-down experiential change over time. Consider the following example:

¹⁵ Evidence and Inquiry, p. 126



ACROSS

- 2 A bass is mightier than this.
4 A small dog's bark

DOWN

- 1 A quarterback's signal
3 A jewel
5 A mathematician's pastry

Suppose an answer for 3 down is being looked for. After repeated inability to find an entry that fits the clue, the spaces, and the “T” at the beginning and “Y” at the end, the puzzle-solver must reconsider her intersecting beliefs. She considers words that don’t fit the constraints there, and our puzzle-solver is so convinced that the answer to 3 down is RUBY, she writes RUBY lightly in pencil, erasing the entry TROUT (though she had been pretty certain of it, given that it fit with HUT and seemed to fit with the clue quite well). She still holds that RUBY could be wrong, and TROUT could be right, but decides to try this strategy for the time being.

She tries to think of other types of common small fish that end in “R” but has no success. After a while of frustrated thinking, it hits her “bass” is not only a type of fish, but, pronounced differently, it is also a classification for voice. She realizes she had gleaned the wrong meaning from the clue, and, now thinking of it with this meaning, she quickly fills in TENOR for 2 across, which has the merits of fitting the clue (now that she sees this meaning for it) and fits with RUBY and HUT. In this example, the markings on the page don’t change, but the reading of them does, and it is the reading of the markings, not the markings themselves that play a factor in evaluating the entries.