Ayers, Michael: *Knowing and Seeing: Groundwork for a new empiricism.*
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Rezensiert von Simon Wimmer (Technische Universität Dortmund)

Perhaps the standard approach in theorizing about knowledge is based on the idea that knowledge is, in some sense, a kind of belief. In *Knowing and Seeing*, Ayers pursues an alternative to this standard approach. According to his alternative, both knowledge and belief are kinds of what Aquinas called 'thinking with assent' (24), which essentially differ from one another in several respects. Specifically, knowledge has two properties belief lacks. First, it is a relation of direct cognitive contact with reality. Second, it is perspicuous: if one knows, then one knows that, as well as how, one knows.

The perspicuity of knowledge, Ayers suggests, is evident in cases of perceptually-grounded knowledge. Conducting a "phenomenology of perception" (36), Ayers argues that by attending to the objects we perceive, we come to know about them in a way that makes it obvious to us both that, and how, we know about them. His argument starts from the claim that we perceive not only things like tables, train-crashes, etc., but also our perceptual experiences of these things and the causal relations that hold between these things and our perceptual experiences of them (53–55). This claim entails the perspicuity of perceptually-grounded knowledge, given two further ingredients Ayers relies on.

The first ingredient is a connection between perception and perceptually-grounded knowledge. By Ayers' lights, attentive conscious perceptual experience immediately yields knowledge of the things we perceive. Given his phenomenology of perception, this includes (i) knowledge of our perceptual experiences and (ii) the causal relations that hold between things like tables, train-crashes, etc., and our perceptual experiences of them.

By itself, this first ingredient does not suffice to establish the perspicuity of perceptually-grounded *knowledge*. Could we not know that, and how, we perceive a table, say, without knowing that, and how, we *know* something about it? Crucially, Ayers does not allow perception and perceptually-grounded knowledge to come apart in this way. The second ingredient, then, is this: that it is obvious to perceivers like us that attentive conscious perceptual experience immediately yields knowledge of the things we perceive. Once we add this ingredient, Ayers' phenomenology of perception supports not only the perspicuity of perception, but also that of perceptually-grounded knowledge.

The perspicuity Ayers attributes to perceptually-grounded knowledge in particular, and knowledge in general, might make us worry that Ayers has to implausibly restrict the cases in which we know. In some cases, we seem to know without knowing that and how we know. We might, for instance, have forgotten how we know that pure lemon juice tastes strongly acidic. Did we come to know this via testimony, from a concerned parent, say, or via our own gustatory experience of pure lemon juice? We might have a similar worry also about the directness Ayers attributes to knowledge. On a natural reading, testimonial knowledge, for instance, is indirect insofar as our contact with reality is mediated by the contact our testimonial source has had with reality.

Although Ayers does not intend to offer an extensionally adequate definition of knowledge (27), he accommodates the above cases by distinguishing *primary* from *secondary* knowledge. Primary knowledge is direct and perspicuous; secondary knowledge lacks at least one of these properties. So, both our knowledge that pure lemon juice tastes strongly acidic and our testimonial knowledge are counted as knowledge, albeit only as secondary knowledge (65–68).

The primary/secondary knowledge distinction can usefully be contrasted with the related, but more familiar distinction between *basic* and *non-basic* (e.g. inferential) knowledge. Very roughly, non-basic knowledge is knowledge one has in virtue of knowing something else, whereas basic knowledge is knowledge one has directly, i.e., not in virtue of knowing something else (Ichikawa 2017). Now, if the primary/secondary and the basic/non-basic distinctions employ the same notion of directness, then all primary knowledge is basic. But even so, basic knowledge need not be primary. Basic knowledge may, for all the basic/non-basic distinction tells us, fail to be perspicuous and so count as secondary knowledge only.

Ayers' takes the distinction between primary and secondary knowledge to carve nature at its joints. Unlike the distinction between knowledge gained on Monday and knowledge gained on Tuesday, for instance, the primary/secondary knowledge distinction is of philosophical importance. The reason for this is that primary knowledge is, for Ayers, the paradigm on which other instances of knowledge depend. Possession of some primary knowledge is required for the possession of any secondary knowledge. This, Ayers suggests, is due to the aboutness-fixing role of primary knowledge. Possession of some primary knowledge is required for our "judgements even to be about the world or, indeed, to have any content at all" (28).

As my brief sketch highlights, Ayers' book contains a wealth of claims and arguments of interest to epistemologists and philosophers of mind. Moreover, there are many other substantial, and controversial, aspects of Ayers' discussion I cannot cover here, ranging from topics such as defeat, evidence, factive mental states, and scepticism, to historical figures such as Plato, Descartes and Locke.[1] The breadth of topics Ayers discusses in *Knowing and Seeing* is, as this list makes clear, impressive. In this review, however, I will focus on some claims Ayers makes in his discussion of the objects of knowledge in chapter 4; claims related to his view that knowledge is a relation of direct cognitive contact with reality.

<p style="text-align:center">*</p>

On some readings of 'reality', Ayers' view that knowledge is a relation of direct cognitive contact with reality is uncontroversial. This is the case, for instance, if we read 'reality' such that propositions count as bits of reality. Both defenders and detractors of the idea that knowledge is, in some sense, a kind of belief are liable to take knowledge to be a *propositional* attitude, a relation to a proposition or a state with a propositional content. In this respect, both sides of the debate tend to assimilate knowledge to belief, the prototypical propositional attitude. Ayers, however, does not. For him, 'reality' appears to have a more restrictive reading, on which only denizens of the spatio-temporal world of cause and effect – spatio-temporal objects and events, for instance – are counted as bits of reality. On Ayers' view, knowledge is a relation to such denizens of the spatio-temporal world of cause and effect (e.g. 121) rather than propositions.

This claim certainly seems apt for some kinds of knowledge. For instance, the kind denoted by 'know' in ascriptions where 'know' embeds noun or determiner phrases that denote denizens of the spatio-temporal world of cause and effect, as in 'Eli knows their teacher.' But, we may wonder about other kinds of knowledge.

For one, what about the kind denoted by 'know' when it embeds noun or determiner phrases that *fail* to denote denizens of the spatio-temporal world of cause and effect, as in 'Ayesha knows *Heart of Darkness*'? On the intended reading, '*Heart of Darkness*' here refers to the novel or work of literature, which many take to be an abstract object, universal, or type, i.e., not a denizen of the spatio-temporal world of cause and effect. For another, what about the kind of knowledge denoted by 'know' when it embeds a 'that'-clause (henceforth

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[1] The chapter in which these historical figures are examined is co-authored with Maria Rosa Antognazza.

'knowledge-that')? As Ayers admits, 'that'-clauses do not denote denizens of the spatio-temporal world of cause and effect either (see 100 and his claims that neither facts nor propositions count as such denizens). But, knowledge-that is arguably the focus of the standard propositional approach to knowledge.[2]

Ayers does not explicitly address cases like knowing *Heart of Darkness*. But, to do so, he might enlist his distinction between primary and secondary knowledge. He might say that *primary* knowledge is a relation of direct cognitive contact with reality, whilst some secondary knowledge is not, as in the case of knowing *Heart of Darkness*. Moreover, extending his discussion of directness and perspicuity, Ayers might argue that this revised distinction too carves at nature's joints; direct cognitive contact with things outside reality in Ayers' sense might, for all Ayers has said, depend on direct cognitive contact with bits of reality. Knowing *Heart of Darkness*, for instance, might depend on direct cognitive contact with a physical copy of the novel.

Although this possible reply raises many interesting questions, let's turn to how Ayers addresses knowledge-that. Here, the core move is to hold that a 'that'-clause embedded under 'know' does not have the function of specifying the object of the knowledge ascribed. To illustrate, consider the 'that'-clause in 'Michael Ayers knows that Caesar was assassinated' (the example is adapted from 126–127). On a natural reading of Ayers' view, this 'that'-clause specifies a description or mode of presentation under which Ayers knows of the event of Caesar's assassination (with which he may stand in either direct or indirect cognitive contact). The object of Ayers' knowledge-that is Caesar's assassination, a bit of reality, not the denotation of the 'that'-clause.

This story about the function of 'that'-clauses embedded under 'know' surfaces also in Ayers' explicit account of knowledge-that, illustrated with a different example in the following quotation:

> To *know that* Bill hit Dick is [(i)] to *know of* […] an actual, concrete, determinate, particular event, describable as Bill's hitting Dick, and [(ii)] to know of it *as* Bill's hitting Dick, whether or not we know of it in any other way. (125)

The idea here seems to be that knowledge-that consists of two elements. The first, in (i), is knowledge of an event; the second, in (ii), is a description or mode of presentation under which one knows of the event. Contrary to the standard approach, on which knowledge-that is a propositional attitude, then,

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[2] For reasons of space, I set aside cases where 'know' embeds concealed questions and 'wh'-questions. On a standard propositional approach, they ultimately also concern knowledge-that.

knowledge-that is, at least partly, a relation of cognitive contact (either direct or indirect) with reality in Ayers' sense.

Ayers' account of knowledge-that is intriguing in how radically it differs from standard approaches. Its radicalism, of course, raises many important questions Ayers does not address head-on. For instance, what is it to know *of* an event? For defenders of the standard approach, it is natural to say that to know of an event just is to know that the event occurred (or, perhaps, that it has some other contextually relevant property). Can Ayers say something similarly informative about knowledge of an event or is he forced to treat this relation as a primitive? Another question worth exploring is: what are the relevant descriptions or modes of presentation under which one knows of events? Ayers suggests that they need not involve the exercise of concepts (see, e.g. ch. 3); they can, in some sense, be non-conceptual. This, however, tells us only what they need not be, it does not tell us what they are.

I now want to turn to a more basic question than either of those just raised. Why should we seek an alternative to the standard approach to knowledge in the first place? The remainder of this review will critically assess Ayers' answer to this question.

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Curiously, Ayers' argument for his view does not proceed by arguing against the standard approach. Instead, it advances by arguing against a distinct non-standard account, on which knowledge, in particular knowledge-that, is a relation to a fact. (Ayers' discussion assumes, as will I, that facts are distinct from true propositions.) This dialectical setup is due to the fact that Ayers begins chapter 4 by surveying some familiar linguistic arguments for the factual approach. Initially, Ayers seems to endorse these linguistic arguments; he defends them from some concerns raised in Williamson's *Knowledge and Its Limits* (2000) and, by his own admission, finds no fault with them (121). Ultimately, however, Ayers seems to reject the conclusion that knowledge-that is a relation to a fact, as he takes there to be metaphysical arguments to the effect that knowledge (in general) is a relation to objects and events instead (121–125).

Ayers' metaphysical arguments easily generalize to the claim that knowledge is a relation to a proposition. So, despite Ayers' own dialectical setup, he is in a position to argue against the propositional approach. However, whether used against the propositional or the factual approach, his metaphysical arguments strike me as unsuccessful, at least as they stand.

Ayers' metaphysical arguments start from a claim he describes both as a potential truism and as an intuitive and philosophically very traditional thought: "The object of any knowledge of the world is also a significant cause of the subject's possession of that knowledge" (121). This claim, which we may label *the causal principle,* licenses the conclusion that we know objects and events, rather than facts or propositions, via the auxiliary premise that objects and events can stand in causal relations, whilst facts and propositions cannot (they are not bits of reality in Ayers' sense).

To reply to Ayers' metaphysical arguments, we might insist that facts do stand in causal relations and that they just are those bits of reality that correspond to true propositions. However, Ayers argues that this will not work. For him, facts, albeit distinct from true propositions, are too tightly linked to true propositions to stand in causal relations: "if two [true] statements or propositions are distinct, the corresponding facts are distinct" (122). This fineness of grain, Ayers contends, makes facts "too thinly abstract" (ibid.) to be denizens of the spatio-temporal world of cause and effect.

Setting aside whether Ayers' case for his auxiliary premise is successful, an alternative, more straightforward response to Ayers' metaphysical arguments focuses on the causal principle. Ayers' description of this principle suggests that he is prepared to treat it as bedrock. Yet it is unclear that his opponents would concur. This is not to say that they would reject the causal principle across the board. Even Ayers' opponents are likely to admit that there are kinds of knowledge that satisfy the causal principle. Following Benton (2017: 822), for instance, they may hold that *interpersonal knowledge* – the kind of knowledge ascribed by sentences like 'Umut knows Mina personally' – satisfies the causal principle by satisfying a condition of reciprocal causal contact.

Admitting this much, however, does not force Ayers' opponents to accept the causal principle as it applies to knowledge in general or knowledge-that in particular. It is unclear, moreover, whether rejecting the principle would, from their perspective, be a cost of adopting their theory. In sum, then, Ayers' metaphysical arguments do not, as they stand, motivate seeking an alternative to the propositional approach to knowledge.

How else might Ayers argue against the propositional approach? He could enlist the linguistic arguments for the factual approach to knowledge-that mentioned above. These arguments could not, for Ayers, establish that any knowledge is a relation to bits of reality in his sense, since, according to Ayers, facts fail to be denizens of the spatio-temporal world of cause and effect (121–124). (Moreover, as they concern knowledge-that, the linguistic arguments do

not straightforwardly apply to cases of knowledge like knowing *Heart of Darkness*.) But, if successful, the linguistic arguments would at least vindicate Ayer's rejection of the standard propositional approach.

Ayers discusses two linguistic arguments for the factual approach. The first, originally due to Vendler (1972: ch. 4) and developed slightly differently by Ginzburg (1995), turns on the observation that the verbs 'know' and 'believe' differ in whether the 'that'-clauses they embed can be transformed into 'wh'-complements. Here are examples of the contrast:

1.   a. Izzy knows that Sasha will arrive next.

        b. Izzy knows who will arrive next.

2.   a. Izzy believes that Sasha will arrive next.

        b. # Izzy believes who will arrive next.

For Vendler, the contrast here results from an ambiguity in 'that'-clauses: 'that'-clauses embedded under 'know' denote facts; 'that'-clauses embedded under 'believe' denote propositions. Crucially, 'that'-clauses denoting facts can, according to Vendler, be transformed into 'wh'-complements, whereas 'that'-clauses denoting propositions cannot. For this reason, the 'that'-clauses embedded under 'know' can be transformed into 'wh'-complements, whilst those embedded under 'believe' cannot. Given this explanation of the contrast between 1 and 2, and assuming that 'that'-clauses embedded under 'know' specify the object of knowledge-that, knowledge-that is a relation to a fact.

However, as noted already by Rosenthal (1976: 249), the fact that 'that'-clauses permit different transformations across different contexts need not be explained by a difference in the 'that'-clauses themselves. Rather, it may be due to a difference in the 'that'-clauses *together with their contexts*. In effect, linguists have pursued this strategy since Vendler.

To illustrate, consider a recent explanation of the contrast between 'know' and 'believe' visible in 1 and 2 (Mayr 2019, Theiler et al. 2019). Very roughly, on this view, the verb 'believe' has a defeasible opinionatedness presupposition, according to which for any question Q, one believes some answer to Q. 'Know', by contrast, has no such presupposition: reasonably enough, we do not presuppose (not even defeasibly) that for any question Q, one knows some answer to Q. But now, in using a sentence like 2b, we assert that Izzy believes some answer to Q – much like, in using a sentence like 1b, we assert that Izzy knows some answer to Q. This means that 2b's asserted content is trivial with respect to its presupposition, which makes the sentence as a whole infelicitous. No such triviality arises for 1b, however. Thus, we predict the desired (in)felicity contrast.

This explanation relies on a difference in the verbs 'believe' and 'know', which gives rise to a difference in the 'that'-clauses *together with their contexts*, but no difference in the 'that'-clauses themselves. So, for all we have said, the 'that'-clauses at issue may all denote propositions (although these propositions might be surprisingly question-like, see Theiler et al. 2019). This highlights that, for the first linguistic argument to go through, Ayers still has to rule out alternatives to Vendler's explanation.

What about the second linguistic argument for the factual approach? This argument, variants of which can be found in Ginzburg (1995) and Moffett (2003) among others, turns on a particular truth-preserving extension of knowledge ascriptions. 'Michael Ayers knows that Caesar was assassinated' can be extended to 'Michael Ayers knows the fact that Caesar was assassinated' without changing its truth-value. This shows that knowing that P entails knowing the fact that P. But this entailment, Ayers thinks, suggests that knowledge-that is a relation to a fact, namely the relation of knowing the fact that P, rather than a relation to a proposition.

Now, some find sentences where 'know' embeds 'the fact that' infelicitous (e.g. Holton 2017). Evidently, this weakens the present argument's persuasive force. However, even setting this issue aside, it is at best unclear whether the argument goes through. To see this, suppose we say, inspired by King (2002) (see also Forbes 2018), that the verb 'know' is ambiguous (or polysemous) between a reading operative when it embeds 'that'-clauses – its *knowledge-that reading* – and a reading operative when it embeds certain noun and determiner phrases, like 'their teacher' – its *acquaintance reading*. Although it remains debated what exactly triggers these readings, there is significant evidence for their existence (see, e.g., Heim 1979). To take just one suggestive datum, languages other than English use different lexical items in translating English knowledge ascriptions. German, say, distinguishes 'wissen', used to translate occurrences of 'know' embedding 'that'-clauses, and 'kennen', used to translate occurrences of 'know' embedding certain noun and determiner phrases, like 'their teacher'. 'Wissen' and 'kennen' thus correspond closely to the proposed readings of 'know': 'wissen' to the knowledge-that reading and 'kennen' to the acquaintance reading.

Of course, what we have said so far leaves open which of its two possible readings 'know' receives when it embeds 'the fact that P'. Uegaki (2016: 651), however, presents evidence that it receives its acquaintance reading. His move is to translate 'the fact that P' into German and ask under which verbs used to translate 'know', if any, this translation can be felicitously embedded. He then

observes that at least one German translation of 'the fact that P', namely 'die Tatsache, dass P', can be felicitously embedded only under 'kennen'; embedding it under 'wissen' leads to ungrammaticality.

    3.   a. Hans kennt die Tatsache, dass P.

               b. # Hans weiß die Tatsache, dass P.

Prima facie, then, the only felicitous German translation of English knowledge ascriptions involving 'the fact that P' employs the lexical item corresponding to the acquaintance reading of 'know'. Considering German, we thus have evidence of the possibility of acquaintance with a fact, but not of the possibility of knowledge-that of a fact. While the possibility of acquaintance with a fact is independently attested, the possibility of knowledge-that of a fact is not. This, however, suggests that when we embed 'the fact that P' under 'know' and get a true sentence, 'know' receives its acquaintance reading. From the perspective of Ayers' opponent, then, the entailment from knowing that P to knowing the fact that P shows, as far as we know, only that knowing that P entails acquaintance with the fact that P, not that knowledge-that is a relation to a fact.

    At this point, Ayers might challenge Uegaki's data. Since the German native speakers I have consulted (including myself) have had mixed reactions to 3a, this might be a promising avenue to explore. Alternatively, Ayers might note that the factual approach explains why knowing that P entails knowing the fact that P by saying that they are the same relation. Absent an alternative explanation, this explanatory power, Ayers might insist, supports treating knowing that P as a relation to the fact that P, rather than the proposition that P. However, Uegaki's discussion (ibid.) highlights a crucial question for this reply: is the factual approach in fact the only available explanation?. Uegaki presents a derivation of knowing that P from knowing the fact that P, which explains the entailment from the latter to the former, without requiring the two to be the same relation. Inspired by this, Ayers' opponent might attempt to give an analogous derivation of knowing the fact that P from knowing that P. Of course, whether such a derivation ultimately succeeds remains to be seen. For present purposes, however, it suffices that, as far as extant discussions go, it is unclear whether the factual approach to knowledge-that enjoys any advantage over a more standard propositional approach that distinguishes knowledge-that from acquaintance. To sum up our discussion of the metaphysical and linguistic arguments in ch. 4 of *Knowing and Seeing,* Ayers has to say more if he wants linguistic or metaphysical considerations to motivate the search for an alternative to the standard propositional approach to knowledge.

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By way of conclusion, let me emphasize again that my critical discussion of Ayers' impressively rich book has been very selective. I have left out many aspects of Ayers' argumentation that, in a longer piece, would have deserved extensive coverage; for instance, his arguments that perceptual experiences and perceptually-grounded knowledge alike have non-conceptual content. Still, I hope to have said enough to give a sense of how radically *Knowing and Seeing* departs from some standard approaches in epistemology and how much interest there is in taking these points of departure seriously.

Acknowledgements

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