'The mechanism—the secret—of the given' Galen Strawson

Synthese 2021 https://doi.org/10.1007/s11229-021-03273-7

slightly revised

'How exquisitely the individual Mind ... to the external World / Is fitted:—and how exquisitely, too ... / The external World is fitted to the Mind' Wordsworth 1814: xiii)

1 The Myth

In 1956 Wilfrid Sellars published a famous criticism of the 'myth of the given'. John McDowell is perhaps the leading present-day defender and developer of Sellars's position, and I'd like to begin this talk by quoting an email exchange I had with McDowell in 2007 after listening to a lecture he gave in Oxford.¹

GS: "I've often thought: There is, of course, the given. The question is: What is given? There is in that sense no 'myth of the given', just a wrong answer to the question 'What is given?""

JM: "Exactly. The Myth is a conception of what givenness could be, not the very idea that something could be given."

Something *is* given in perceptual experience. It's not a myth that this is so. In fact it's trivial, given the use of the word 'given' in this debate.

There is today, I think, a fairly broad consensus on what is most properly said to be given in perceptual experience. But the language in which we express the idea of the given is wonderfully slippery, and the point is worth regular restatement—variation. I'll begin with my own simple account of the myth of the given ('the Myth') and focus on the case of visual experience. I'm not very familiar with Sellars's arguments, and don't suppose I have anything to add to them. I do, however, have something to add to the history of the issue, if only because analytic philosophy has so little memory of its past: I have in mind the foundational part played by 'critical realists' like Wilfrid Sellars's father, the philosopher Roy Wood Sellars, and the philosopher and psychologist Charles Augustus Strong.

1 This paper is part of the topical collection "Demystifying the Given", edited by Andrea Altobrando and Haojun Zhang. It derives from a talk at a conference organized around Michelle Montague's 2016 book *The Given* at the China University of Political Science and Law in Beijing in October 2019. When I cite a work I give the date of first publication or composition; the page or section reference is to the edition listed in the bibliography. In the case of quotations from languages other than English I cite a standard translation but don't always use it; I use bold italics to mark an author's emphasis and italics to mark my own.

2 The Ur Myth

It's not a myth that something is given in experience. It's not a myth that something is *simply* given in experience. It's not a myth that something is *immediately* given in experience.

The previous sentence may be misunderstood. I mean that it's not a myth that something is *experienced* as being immediately given in experience.

The previous sentence may be misunderstood: it's not a remark about second-order reflection on the nature of experience. It's a characterization of unreflective everyday experience—whether of an adult, a seven-year-old child, or a dog. We can rephrase it: it's not a myth that something is immediately given *phenomenologically speaking*.

The previous sentence may be misunderstood, and it's worth deflecting one possible misunderstanding straight away. To say that something is immediately given phenomenologically speaking is not to say that nothing non-phenomenological is immediately given, even if there's one philosophically impeccable (Strongian) way of understanding 'immediate' given which that is, in the end, the right thing to say. The wording allows that something non-phenomenological may be immediately given.

The term 'immediate' is very troublesome. I'll return to it. For the moment it's enough to say that the *Ur* Myth is only that what is immediately given in perceptual experience is merely or purely sensory in character, wholly a matter of what are still sometimes known as 'raw feels'.²

Although that's all there is to the Ur Myth, as I understand it, it's standardly coupled with a further claim: the old empiricist claim, so very vividly presented by David Hume, that all our knowledge of the world around us is built up on or from a basis or foundation of merely sensory contents, and necessarily so, since, strictly speaking, they are all that is ever actually given in experience.

There's a simple proof that this can't be right. I'd like to think that a proof isn't needed, in this sweetly enlightened age, but 'to truth only a brief celebration of victory is allowed between the two long periods during which it is condemned as paradoxical, or disparaged as trivial',³ so it's probably worth rehearsing. It starts from the fact (the assumption, if you insist, and you may) that we have beliefs about the world around us that amount to knowledge of the world. It goes on to point out that beliefs must be justified in order to count as knowledge. It ends by observing that mere sensory contents (supposing we ever actually had pure or naked access to such things) could never justify beliefs about the existence of any concrete existents other than sensory contents. They could (for example) never justify beliefs about the existence of things

² This is very different from Sellars's later statement of 'the most basic form of what I have castigated as "The Myth of the Given": the claim that 'if a person is directly aware of an item which has categorial status C, then the person is aware of it as having categorial status C' (1981: 11, §44).

³ Schopenhauer (1819–50: p. xxv). Another remark about truth attributed to Schopenhauer: 'All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident.'

3 Concept-empiricism

Nor can they ever explain how we got hold of these concepts—table, chair, person, mountain—in the first place. Behind the old empiricist claim about *knowledge* lies a prior claim about concepts, or more generally *thought-elements*. It brackets the question of knowledge, if only temporarily, in order to insist that all the thought-elements that enter into our conception of the world, *insofar as it's a theoretically legitimate conception of the world*, derive wholly from merely sensory contents. It insists that the thought-elements derive from sensory contents in such a way that they're fully traceable back to them: they have no content additional to what can be directly derived from, as already contained in, the sensory contents.

The qualification 'theoretically legitimate' is crucial, because it's obvious that our ordinary conception of the world does contain thought-elements whose content can't be reduced to sensory content in the way proposed. No one is more aware of this than Hume. This is why he says that many of our actual thought-elements (he calls them 'ideas') are *fictions*. By a 'fiction' he means precisely a thought-element whose content can't be traced back to sensory content in the way proposed.

It doesn't follow that the fiction doesn't in fact cotton on to the truth. A fiction in the philosophical sense of the word (which survives into the twentieth century) is what we today might call a *posit*: a posit that goes beyond the evidence. A posit needn't be a fiction in the standard modern sense, i.e. something made up that has, by definition, no correspondence to anything that exists in reality. It may in fact, like a Humean fiction, cotton on to the truth. The word 'fiction' (and its cognate verb 'feign') derives from the Latin *fingo* (*fingo fingere finxi fictum*), the word that Hume's intellectual hero Newton used so famously when he said 'hypotheses non fingo'. By this Newton meant that he wasn't going to go beyond the evidence and speculate about—posit something as—the actual or 'true cause' (the 'vera causa') or mechanism underlying or making true the laws of motion, although he quite rightly took it to be obvious that there was some such cause. He was just going to state the laws.

The idea that all such posits are fictions in the philosophical sense survives in a well known passage in Quine's, 1951 paper 'Two dogmas of empiricism' in which he compares our everyday conceptions of objects like tables and chairs, persons and mountains, to a set of literal fictions:

Physical objects are conceptually imported into the situation as convenient intermediaries—not by definition in terms of experience, but simply as irreducible posits *comparable*, *epistemologically*, *to the gods of Homer*. For my part I do, *qua* lay physicist, believe in physical objects and not in Homer's gods; and I consider it a

⁴ See e.g. Strong (1918: pp. 39–40). See also Dewey (1907: 309n.): 'the fallacy of orthodox logical empiricism [very early use of the term] is right here. It supposes there can be 'givens', sensations, percepts, etc., prior to and independent of thought or ideas, and that thought or ideas may be had by some kind of compounding or separating of the givens. But it is the very nature of sensation or perception (supposing these terms to have any knowledge-force at all, such as Lockean empiricism ascribed to them) already to be, in and of itself, something which is so internally fractionized or perplexed as to suggest and to require an idea, a meaning'.

scientific error to believe otherwise. But in point of epistemological footing the physical objects and the gods differ only in degree and not in kind. Both sorts of entities enter our conception only as cultural posits. The myth of physical objects is epistemologically superior to most in that it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience (1951: 44).

With this in hand, we can return to the Myth.

4 Knowledge of the world

In the first instance, to say that the Myth is a myth is to say only that what is (immediately) given in experience is experience *as of* a world of tables and chairs. One can agree with this even if one thinks that some version of Berkeley's or Kant's account of experience is correct, and also thinks (contrary to Berkeley and Kant) that it follows that experience isn't *really* experience of a world of tables and chairs.⁶ One can agree with it even if one is convinced that one is living in a virtual-reality simulation.

This shows two things. First, rejection of the Myth is necessary even if one doesn't think one has genuine knowledge of the world around one. Second, rejection of the Myth, even though necessary, isn't sufficient to guarantee that we do have knowledge of the world in the way we think we do.

Many philosophical moves are possible at this point. Some may say that, properly understood, Kant's 'empirical realist' account of the world of tables and chairs does guarantee that we can be said to have knowledge of the world in the way we think we do. Here, however, I'm going to put this move aside. I'm going to endorse outright 'village' realism about the world of tables and chairs and take it that even on this assumption we may be said to have knowledge of the world around us—in a way that wouldn't be possible if the Myth were not a myth.

Some may now protest that the Myth isn't a myth, and that we don't have knowledge of the world around us in the way we think we do; or at least that we don't—and can't—know that we do. I think we can allow ourselves to be fleetingly charmed by this protest, even as we reject it. We don't, however, reject it as hopelessly foolish but strictly speaking indefeasible—as we might, with Hume, reject Berkeley's view of things ('Dr. Berkeley's... arguments ... admit of no answer and produce no conviction', Hume 1748–51: §12.15 n.). As evolutionary naturalists we reject it as simply false; even as we admit—while remaining completely philosophically relaxed—that scepticism with respect to the external world is strictly speaking irrefutable.

It's important to note that we can reject the empiricist line of thought set out in the last section even as we respect the most fundamental principles of empiricism, and wholly endorse the theory of evolution by natural selection in all its magnificence. We can do this so long as we have a properly *phylogenetic* conception of empiricism, as opposed to an absurdly *ontogenetic* conception, and understand that, over the aeons,

⁶ According to Kant, that which affects us in such a way as to give rise to our experiences of tables and chairs is not even spatial—or temporal.

experience has taught us to conceptualize; to *think*. It has taught us logic, it has created the power of thought and thought itself, something as natural as water.⁷ I'll say a little more about this later.

5 Immediacy and error

I've talked about what is given, and what is 'immediately' given. I need to say more about what I mean by 'immediately'. Strictly speaking nothing in perception is immediate—literally immediate. Sound waves and light waves take time to travel from the objects they reveal to us to our ears and eyes. All neural processes take time, and all perception involves a lot of neural processing.

True. But don't we sufficiently know what we mean by 'immediate' in this particular philosophical context?

I'm not sure. I'm going to vacillate, in the belief that vacillation (bumbling about) may be instructive. I'm inclined to say that 'immediately given' is pleonastic, i.e. that whatever is given, in the sense of 'given' central to this debate, is *ipso facto* immediately given. This amounts to a terminological decision, for we can plainly make sense of the claim that something is given but not immediately given; I'm encouraged by the fact that it conforms with C. A. Strong's usage.

The first and fundamental force of 'immediate' is surely phenomenological. When we look out of a window and see a cow under a tree on a hill, it's phenomenologically accurate to say that a tree and a cow and a hill are immediately given to us. This is how evolution has built us; the given has an irreducibly $cognisensory^{\delta}$ character. It certainly doesn't have a merely sensory—e.g. colour-patch—character (to take the visual case). The Ur Myth is indeed a myth.

We can take a further step. In everyday life, the phenomenological fact just mentioned warrants a non-phenomenological claim. For a tree and a cow and a hill to be *immediately phenomenologically given in perception* is for them to be *immediately given in perception* full stop (the word 'phenomenologically' doesn't introduce any restriction or qualification and can be dropped). We can take a further step. For tree, cow, and hill to be *immediately given in perception full stop* is for them to be *immediately given full stop* (the phrase 'in perception' doesn't introduce a restriction or qualification and can be dropped). In this simple sense we're in immediate contact with things outside us. They're 'directly known' by us (Strong, 1908: p. 172; see also Strong, 1918: p. 42, 1930: p. 27, 1936: p. 37), even though all perception takes time. Full marks to evolution.

I'm going to question the *immediacy* claim—or terminology—later on, while endorsing the *directness* claim; following Strong. I think this will be a worthwhile philosophical exercise, even if some find it painful. Before that, I want to note that the psychologist Donald Hoffman already disagrees with the knowledge claim. In his popular book *The Case Against Reality: Why Evolution Hid the Truth from Our Eyes*,

⁷ Of which, one might perhaps say, it largely consists: the brain is about 78 per cent water.

⁸ Here I adopt Albahari's useful term (see e.g. Albahari 2019: p. 7). A clumsier alternative might be 'conceptuosensory'. In the past I've put the same point by saying that all perception has *cognitive-phenomenological* content in addition to sensory-phenomenological content; or that it essentially involves *cognitive* experience in addition to *sense-feeling* experience. (The cognitive phenomenology of *linguistic understanding* is only a small part of cognitive phenomenology; see e.g. Strawson 2011.).

in which he rehearses his 'interface theory of perception', he argues that evolution doesn't care about truth, only adaptive fitness, and further that 'natural selection drives true perceptions to swift extinction ... evolution shaped our perceptions to hide the truth and to guide adaptive behavior' (2019: pp. 57, 179).

Hoffman doesn't mention Nietzsche's many elaborations of this point—in *The Gay Science*, for example, in which he speaks of 'delusion and error as a condition of cognitive and sensate existence' (1882–7: §107), of the 'fundamental errors of all sentient existence ..., errors [that] turned out to be useful and species-preserving' (§110), and of how 'the perceptions of sense and generally every kind of sensation worked with ... basic errors that had been incorporated since time immemorial' (§110).⁹

Descartes also made the point, in effect, although he credited God rather than evolution: 'the proper purpose of the sensory perceptions given me by nature is simply to inform the mind of what is beneficial or harmful' (1641: 2.57). Locke also:

simple ideas [like colour and shape] are the product of things operating on the mind, in a natural way, and producing therein those perceptions which by the wisdom and will of our maker they are ordained and adapted to. From whence it follows, that simple ideas *are not fictions* of our fancies, but the natural and regular productions of things without us, really operating upon us; and so carry with them all the conformity which is intended; or which our state requires: for they represent to us things under those appearances which they are fitted to produce in us: whereby we are enabled to ... take them for our necessities, and apply them to our uses. Thus the idea of whiteness, or bitterness, as it is in the mind, exactly answering that power which is in any body to produce it there, *has all the real conformity it can or ought to have*, with things without us. And this conformity between our simple ideas and the existence of things, *is sufficient for real knowledge*.¹⁰

'Sufficient for real knowledge'. Hoffman disagrees. He concludes that we do not after all directly perceive or have knowledge of the world, and that the world is not given to us, let alone immediately given. It's an understandable position. It seems to me, though, that the fact that our sensory-intellectual constitution was so carefully and minutely hammered out, over billions of years, on the long, slow anvil of evolution by natural selection, locks us fiercely to the world in such a way as to be sufficient—many times over—for the truth of the claim that we do directly perceive and have knowledge of the world. Although ignorant of evolution, Wordsworth makes the point in the epigraph to this paper:

How exquisitely the individual Mind ... to the external World

⁹ 'Contrary to the tendency of most "evolutionary epistemologists", Nietzsche's main thrust is that it's *errors* ... that have been ... functional. Our cognitive practices are crucially built out of dispositions designed to get things wrong—i.e., out of drives to simplify and otherwise distort reality' (Richardson 2008: p. 40). See also Nietzsche (1885–8: pp. 15, 21, 35, 56, 109): 'truth is the kind of error without which a particular kind of living creature could not live' (1885–8: p. 16).

¹⁰ 1689–1700: §4.4.4. In 1979, when we were briefly colleagues, and I was generally confused, John Mackie kindly wrote out parts of of this passage for me on an index card.

¹¹ What if our perceptual capacities were a product of cosmic fluke? Would we then no longer have knowledge? The puzzle is of a familiar form.

Is fitted:—and how exquisitely, too ...
The external World is fitted to the Mind (1814: xiii)

You may feel that this doesn't give you enough, in the way of knowledge or non-phenomenological givenness. In that case you may have to embrace some version of Kantian (or, better, neo-Kantian) 'empirical realism' after all; or else, perhaps, P. F. Strawson's radical doctrine of 'the relativity of our "reallys", given which 'the same thing can both be, and not be, phenomenally propertied'.¹²

6 The receiver

'The given' is not a myth; we all—perhaps—agree: Michelle Montague's book *The Given* (2016) doesn't lack a subject. Focusing on the case of perceptual experience, she offers the following highly general characterization of what is given: it's 'absolutely ... everything ... one is aware of, experientially, in the having of the experience' (2016: p. 30): cows, trees, colours, shapes, sounds; 'everything that you are aware of in having that ... experience, whether it is in the focus of awareness or at the periphery' (2010: 498); including the experience itself.¹³

I think that this is the best way to speak of the given, all in all (it's also, I believe, the best way to understand the notion of mental content). He but many philosophers are particularly interested in a narrower sense of the term, according to which the basic sensory qualities are *not* given. These philosophers particularly prize the idea that 'the world' is (±immediately) given, and seem to worry—I think quite wrongly—that the sensory qualities might be thought to get in the way if they too were thought to be (±immediately) given. 'Suppose there's someone standing beside you', they may say, 'with their eyes shut, blessedly untouched by philosophy. You ask them to open their eyes and say immediately what they see. They say, truly, "I see a cow ruminating under an elm tree in a field." What is given to them in such perceptual experience, what is *immediately* given to them, is: the world, the cow-containing world. *Surely* this is the best thing to say?'.

It's a very good thing to say, but there's no need to say that phenomenal colour—colour considered as 'merely' sensory content, and indeed as something that is not itself 'out there in the world' at all—is not also given. And there's a prior question. If something is given, it's given to someone or something (all giving is, trivially, *dative*). When we speak of the given, we must be able to say something about who or what it's given to. We usually focus on what is given to an ordinary adult human being, rather than a new born baby or (something very different) a six-month-old infant or (something very different again) a two year old child; or for that matter a new-born puppy or fully grown dog. But we shouldn't forget babies and children (and dogs). We

¹² P. F. Strawson 1979: p. 143; 1983: p. 45. See also W. S. Sellars's distinction between the 'manifest image' of reality and the 'scientific image' (1963: p. 5).

¹³ For the last controversial claim, see Montague (2016: ch. 3). For a more detailed specification of the given, see Montague (2016: pp. 34–37).

given, see Montague (2016: pp. 34–37).

¹⁴ On any natural understanding of the term, mental content is as much a matter of 'internal' (Twinshareable) content as 'external' content, as much qualitative as conceptual/propositional.

¹⁵ Ruminate: '3.a. intransitive. Of an animal: to chew the cud; to chew again food that has been partially digested in the rumen' (Oxford English Dictionary).

¹⁶ Don't we also need to say who or what it is given by? No, although this shows that the term 'given' is not ideal.

need to bear in mind that what is given to a human being—Lucy, say—as a result of impacts on her sensory organs changes dramatically as she grows older, because of changes in the way in which she is internally disposed. The very same sensory inputs can result in very different things being immediately given to Lucy when she's three weeks old, six months old, two years old, twenty years old, as developmental changes take place in her.

Many of the important developmental changes take place in her brain, as she grows up, but developments in the retina (the pre-cortical visual system in general) are no less crucial, and there are fundamental respects in which the whole body is involved. It's an old point, recently reactivated by the 'enactivists', that we must take the body as a whole into account when we consider the nature of perception.

Some present-day enactivists may go too far, but the basic idea is certainly correct. It's present in William James's *Principles of Psychology* and received a powerful early expression in Dewey's influential paper 'The Reflex Arc Concept in Psychology' (1896). It's well expounded by the psychologist Margaret Washburn, among others, in her 1916 book *Movement and Mental Imagery*, and its more distinctively philosophical aspects are valuably developed by Strong and his contemporary and wingman Durant Drake. All in all, I think Strong's enactivist view of perception is closer to the truth than the views of many—perhaps most—present-day philosophers of perception.¹⁷

7 'The secret of givenness'—C. A. Strong and R. W. Sellars

It is, Strong says, 'a grave omission, in our search for *the secret of givenness*, to overlook [the] motor function of the sensation' (1918: p. 129). We must not in our account of perceptual experience 'neglect ... the motor side of the mind' (Strong, 1923: p. 24), for it's only by recognizing 'the essential importance of movement or the tendency thereto as a factor in cognition', which includes perception, that we fully grasp the point that '*the datum is distinct from the sensation*' (ibid.).

The datum = the given, that which is *given* in perception ('datum' is the Latin for given). The datum, the given, is, as Strong says, 'distinct from the sensation'. This is a direct statement of the mythicality of the Myth. The datum in experience is not the sensation or the complex of sensations. It's something intrinsically intentional and conceptually rich, *cognisensorily* rich—a cow, for example, standing under a tree in a field. And this has something essentially to do with 'movement or the tendency thereto'.

What exactly? Before answering let me note that my (currently) preferred use of 'given' is not the same as Strong's. We don't disagree about the Myth, or about the facts of perception, only about how to use the word 'given'. I want to continue to be able to say that what is given is or can be—the world. This he will not do. In Strong's view the given (the essentially *cognisensorily rich* given) is—by definition—identical in the case of [i] a veridical perception and [ii] a phenomenologically identical hallucination or virtual-reality simulation.¹⁸

¹⁷ See in particular (Strong 1930; Drake 1925). More recent exponents of the point include Varela et al. (1991), Clark (1997), Noë (2004). Gary Hatfield has pointed out the respect in which Berkeley already has sound enactivist intuitions (Hatfield 2011: 372).

¹⁸ This is not necessarily a rejection of the many-headed theoretical creature called 'disjunctivism'; it's simply a matter of how Strong defines 'given'.

Certainly the world is in everyday life *known*, according to Strong: 'the only *object of knowledge* in perception is the real thing, which is an existent external to the self' (Strong, 1930: p. 18). Certainly it is *directly* known, on Strong's view— even though things are of course not coloured in the way we pre-theoretically take them to be. There is 'direct knowledge of the object' in perception (1918: p. 41; cp. 1930: p. 28); we "apprehend" it ... directly' (1930: p. 109). 'We directly apprehend the real thing, *and nothing else*' (1931: p. 15). The world—the cow under the tree—is *directly perceived*, in ordinary circumstances (see e.g. 1912: pp. 10–11, 1931: p. 220). But it is not, in Strong's sense of 'given', *given*; let alone immediately given.

Consider a particular *cow-under-a tree-in-a-field* experience e_1 —a dappled Guernsey under a lonely centennial elm. Suppose we call the total cognisensory phenomenological character or content of e_1 'F'. F is *cognisensorily* rich both in being primordially and irreducibly cow-ish and tree-ish, &c., content, and in involving belief in the existence of a cow and a tree.¹⁹

This richness doesn't of course prevent *F* from being strictly *phenomenological* content. It's just that it's essentially *cognitive*-phenomenological as well as sensory-phenomenological content. It's not just colour-patchish! This is how evolution has made us. This is *how* the Myth can be a myth, and *why* it is a myth. Recognition of the existence of cognitive-phenomenological content in addition to sensory-phenomenological content is essential to the claim that the Myth is a myth. Perhaps I should note that I use 'cognitive phenomenology' to mean what I first introduced it to mean (Strawson 1986): to cover any aspect of experiential content that is not merely sense-feeling content.²⁰

With the term 'F' in hand, we can say that Strong's early use of the term 'datum', i.e. his early use of the term 'the given', picks out the F-ness of e_1 . It picks out that in virtue of which e_1 can be identical in its overall (cognisensorily rich, cow-ish and tree-ish, intrinsically-external-existence-affirming) phenomenological content to a different veridical perceptual experience e_2 or equally a non-veridical hallucinatory experience e_3 or a virtual-reality perceptual experience e_4 (perceptual experience, unlike perception, needn't be veridical). This is the datum conceived of as a kind of universal.

It is in fact an 'essence'—a phenomenological essence—in Santayana's special and excellent sense of the term.²² What exactly is a Santayanan essence? The key idea seems simple. A thing's *essence* is everything there is to it other than its actual *existence*; the whole qualitative being of the thing considered independently of its actual realization. I hesitate to be more specific,²³ but both (William Pepperell) Montague and Strong are helpful: it's 'the entire *what* of a thing, without its existence' (Strong, 1918: p. 38). It's everything about a thing that 'can be conceived as *duplicable*' (Montague 1938: p. 576)— including of course all those of its (intrinsic) properties we think of as contingent.

I've used 'F' as a symbol to represent the total cognisensory phenomenological content of e_1 — e_4 . I could just as well or perhaps better have used 'p' instead of 'F'—

¹⁹ These are obviously not merely sensory matters.

²⁰ See further Strawson 2011, esp. §12, where I equate it with 'non-sense-feeling content'. Anyone who conceives of cognitive phenomenology as something whose existence doesn't follow from the mythicality of the Myth has misunderstood what it is.

²¹ There don't in this last case have to be any such things as cows and trees.

²² Non-phenomenological things—tables and chairs—also have essences in Santayana's sense.

²³ See the difficulties of exposition faced in Sprigge (1995).

following the usual philosophical convention according to which 'F' stands for a quality or property and 'p' for a proposition. For what is given in e_1 is not just *cowunder-a-tree-in-a field-ishness*, which could be given in mere imagination, but: *there-is-a-cow-under-a-tree-in-a field*. In the normal case, and as already remarked, perceptual experience is in effect also assertion, or at least affirmation. Strong makes the point: 'perception is in effect an implicit proposition: it is as if we said, There is an existent whose character is so and so'.²⁴

Later on Strong comes to think of the datum—better, it seems to me—as a particular: in e_1 to e_4 , then, we have four givens, four data in Strong's sense, four concretely occurring particulars that are, in respect of the character of what is given (the Santayanan essence), contentfully identical.²⁵

Plainly we cannot tell for certain in a particular case, on the basis of what is given, whether we're normally situated in the world or in a virtual-reality simulation. This is built into Strong's preferred use of 'the given' (or equivalently 'the immediately given'—see Sect. 2). Some philosophers will dislike this very much. It is for all that a very natural philosophical use, inasmuch as it places the given within the bounds of the effectively certain. If something is indeed '*just given*' it seems it should be effectively certain. This idea is I believe built into the original use of the term 'the given'.

And yet, and much as I admire Strong, I prefer the use, common today, that allows that the world itself to be given in veridical experience. I'm confident I can get along with it without losing my grip on the fundamental distinction that Strong marks with his use of 'given', the use that leads him to distinguish between what is *directly perceived* and *known* in a standard case of veridical perception—the cow in the field under the tree—and what is certainly *given* and yet conceivably not the case, not known—i.e. the *there-is-a-cow-under-a-tree-in-a field-ishness* of things.

It's an ancient and familiar point that it can be for me, experientially, just as if I see a cow in a field under a tree although I don't. In this case, according to Strong, there is certainly something *given* although in fact nothing in the world is *known*. With many others, I still (March 2021) find it natural to use 'given' in a way that allows me to say that in the normal veridical case, both the seeming reality and the actual reality are given. Strong by contrast, and perhaps in the end more properly, reserves true givenness for the seeming reality. He treats the question with extreme and compact subtlety. He is very finely aware of 'how extraordinarily difficult it is to state correctly the relation of the datum [the given] to the object!' (1934: p. 319).

Strong's terminological decision will alienate some anti-Mythists, and mine may alienate others, but I'm now going to put the issue aside, and go back to a point that we anti-Mythists have in common: the point that even if the cowish datum (the cowish given) is conceived of as something that is in *some* sense a mental existent (a concrete particular in Strong's mature theory, not a Santayanan essence-universal) it is not a matter of sensation, but something intrinsically intentional and conceptually rich.²⁶ It follows, Strong says,

²⁴ 1930: 17; (Michelle) Montague speaks similarly of 'the properties we attribute in having perceptual experiences' (2016: p. 89).

²⁵ I originally wrote 'qualitatively identical', which is just as good as 'contentfully identical' in this context. It may, however, cause some who hear it to forget that qualitative identity includes identity with respect to cognitive-phenomenological character.

²⁶ Strong hesitates absorbingly on its ontological status. At one point he calls it an *apparent* (see e.g. 1931: p. 218, 1934: p. 323); at another he favours Locke's term *phantasm* (e.g. 1930: p. 28, 1931: p. 218).

that the datum is not properly a datum of sense at all, but—and this is the summit of our wisdom—all data are data of the intellect.

If this be so, then no sensation is ever as such a datum.²⁷

The Myth of the Given, in other words, and once again, is a myth. So too it's a myth that Wilfrid Sellars is the principal twentieth-century progenitor of the view that the Myth is a myth. The central point was made powerfully and repeatedly by several members of the direct-realist, 'critical realist' movement in the philosophical generation that preceded Wilfrid Sellars's and that included his father, Roy Wood Sellars. 'The critical realist', writes Sellars senior in 1932, using the word 'immediate' where Strong would only ever use 'direct',

holds that the external thing denoted and interpreted is the immediate object of perception and that this is not identical with sense-data.²⁸

'Sense-data'—I hesitate to use this term in any philosophical context, even when merely quoting someone else, because it's been used in so many different ways. My current hesitation is particularly great, because Strong uses 'sense-datum' to mean something cognisensorily rich, something whose content is essentially more than merely sensory. A there-is-a-cow-under-a-tree-in-a field visual experience is a sense-datum for Strong. It has nothing to do with a visual sense-datum conceived of as a colour-patch array. In Strong's work, the contribution of the word 'sense' to the meaning of the expression 'sense-datum' is simply and wholly this: it signals that the datum in question is a datum that arises in the course of sensory perception, rather than a datum that arises in the course of introspection, say, or mathematical reflection. The (sense-)datum, to repeat, is simply what is given in the perceptual experience, and what is given is there-is-a-cow-under-a-tree-in-a field, something cognisensorily rich, obviously not a mere colour-patch array; although it does of course essentially involve colour experience.²⁹

This is, I suppose, an eccentric use of 'sense-datum'. I'm afraid it will mislead many, if they read Strong, and this is a pity. R. W. Sellars's use is certainly much narrower, close to the colour-patch use, but the point he's making in the above quotation—a point on which he and Strong fully agree—is clear. As critical realists, both hold that in veridical perception of physical objects, that which is directly perceived is the physical object itself (this achievement—direct perception—is as it were the *work* that the Strongian given or datum does in being what it is). They're both outright *direct realists*, and say so very clearly, although Strong, unlike Sellars, would

²⁷ 1923: p. 24. Strong's notion of the intellect is wide: 'when a not-self appears before the self, it does so because we react or tend to react as if we were in the presence of an object—the feeling being that which prompts us to do so, and directs our activity: in such wise that the datum (the object as given) is apprehended, not by the feeling alone, but by feeling and activity combined—*in other words*, *by the intellect*' (1923: pp. viii–ix).

²⁸ 1932: p. 278. Sellars junior writes that 'a discerning student of philosophy, familiar with the writings of Sellars *père*, who chances to read Sellars *fils*, and is not taken in by the superficial changes of idiom and emphasis which reflect the adaptation of the species to a new environment, will soon be struck by *the fundamental identity of outlook*. The identity is obscured by differences of terminology, method and polemical orientation, but it is none the less an identity' (1954: p. 13; this is certainly not true of my father and me.

²⁹ Strong omits the prefix 'sense-' more often than not when talking about perceptual experience, because it isn't necessary.

never equate 'direct' with 'immediate'. Quite correctly, they see no conflict of any kind between direct realism and the fact that all perception necessarily—trivially—involves mental (re)presentation.³⁰ They have no difficulty with the fact that objects are not coloured in the way we pre-theoretically suppose. They do not make the perennial mistake of thinking that acknowledging the existence of mental (re) presentations cuts us off from direct contact with or knowledge of the world, or triggers the 'spectre' of scepticism.³¹

8 Non-inferential self-attribution of sensations

'All data are data of the intellect', says Strong, focusing on the data of sensory perception. Very good. What is immediately given in perceptual experience, i.e. the cognisensorily rich datum (not the actual object), which is in the case of perceptual (i.e. sensation-involving) experience called a 'sense-datum', is immediately given as something out there in the world—even in the case of hallucination. It's given as something essentially 'transcendent' relative to the experience (to employ the once standard terminology still favoured in the Phenomenological tradition), something essentially ontologically over and above the experience. In the case of everyday perceptual experience, as Drake says, 'external reference', for example 'being-tenfeet-away', 'is an aspect of what is *given*' (1928: p. 56). It's not an *interpretation* of what is given. And so it comes to pass that the immediate givenness of the *datum* is in veridical perception the direct knowing or direct apprehension (1930: 28, 1931: 15) of the actual *object*.

These critical-realist claims seem to me as good as any, as expressions of the error of the Myth. They leave plenty of room for an account (following Sellars junior in his book *Science and Metaphysics*, as adjusted by McDowell in his book *Having the World in View*) of how we can fully admit the existence of one of the principal things that seems to support the Myth without in any way succumbing to it.

What is this? It's the fact that we can as McDowell says engage in 'non-inferential self-attribution of ... sensations' (1998: p. 20) in a way that can make it seem to some that sensations are after all what is most immediately given. McDowell gives a good account of this. Adapting and extending Sellars in a discussion of visual sensation, and picking up Sellars's use of the words 'apperceive' and 'transcendental', McDowell writes that 'the visual impressions or sensations in question are not apperceived when they are playing their transcendental role'. They do not in other words feature in our experience as 'objects for consciousness', in such a way as to be available for non-inferential self-attribution of a sort that amounts to self-knowledge, when they're playing their role as necessary conditions of the possibility of knowledge of the world around us.³² But

that is not to say that they are not apperceivable [i.e. possible objects of non-

³⁰ I argue for this in 'Real direct realism' (2015). I hadn't then heard of the earlier-twentieth-century critical realists.

³¹ Insofar as scepticism is a spectre it is a friendly one; its diaphanous presence is as benign as it is necessary to any sound philosophy. Any theory that purports to refute scepticism thereby refutes itself.

³² This is the point, made vivid by Thomas Reid among others (see e.g. Reid 1764, §§5.2, 6.3), that animates recent discussion of the 'transparency' of experience.

inferential self-knowledge]. It is just to say that if they do get to be apperceived—if they do become objects for consciousness [in a way that amounts to a form of non-inferential self-knowledge]—they can no longer be playing their transcendental role, that of enabling episodes of 'outer sense' One can focus one's attention on the manifold of 'sheer receptivity' that was, a moment before, enabling one's attention to be directed towards the ostensibly seen environment. But in doing so—in bringing it within the scope of one's apperception—one ensures that it ceases to perform that function.³³

Strong makes the same point when he says that what people have in mind when they talk about bare or mere sensation ('feeling') is something that 'becomes a datum only in introspection' (1923: p. 11), i.e. only when sensation is not playing its normal role in our immediate conceptually informed perceptual experience of the world; only when we make a special mental effort to access it stripped of its integral enactivo-conceptual musculature—as painters, for example, learn to do when they are learning to draw accurately, and have to override the promptings of their natural depth perception. 'During perception of the external event', he writes, discussing an ordinary case of hearing something, 'the auditory sensation exist[s] without being a datum' (1923: pp. 3–4); 'the feeling or sensation is never observed at the same time as the external object ... in observation of the external object, it exists without being a datum' (1923: p. 6).

9 'The having is the knowing'

So far, I hope, so good; or more or less. This seems a good place to try to correct a common misunderstanding of my own long-running and enthusiastic use of the expression 'the having is the knowing', when talking about conscious experience.³⁴ There's a sense of the word 'know' in which it is indeed true—in fact trivially true—of all conscious experience that *the having is the knowing*. There is, as Russell says, 'a sense of "knowing" in which, when you have an experience, there is no difference between the experience and knowing that you have it' (1940: p. 49), where this includes knowing what it is like.³⁵ That said, two points need to be made very clear. The first is that this knowing has nothing to do with *introspection*; it's a matter of direct acquaintance. Given this sense of 'know', it's true of any experiencing creature whatever, however primitive, that in the case of experience the having is the knowing.

The second point—the present point—is that this knowing has nothing to do with the Myth. All it says, I confess (but without shame), is that to have an experience is

³³ 1998: 19. 'It requires an effort to become aware of sense-data as such' (Sellars *père* 1932: p. 35). Sellars *fils* has a fine passage on how we are able to think of sensations (take them as objects of consciousness) in the way we do: although there's a clear sense in which 'the conceptual framework of physical color is ... ontologically grounded in visual impressions, the conceptual framework in terms of which common sense conceives these impressions is itself an analogical offshoot from the conceptual framework of physical color and shape. To put the matter in Aristotelian terminology, visual impressions are prior *in the order of being* to concepts pertaining to physical color, whereas the latter are prior *in the order of knowing* to concepts pertaining to visual impressions' (1965: p. 192).

³⁴ See e.g. Strawson (2003, 2020). Thanks to Jacek Jarocki for alerting me to this misunderstanding. ³⁵ Some say that one can know that one is having an experience without knowing what it is like, but this claim, even if defensible, isn't what Russell has in mind.

indeed to have it. It's to have it with—of course—necessarily—trivially—all the phenomenological character that it has; necessarily, because one's having it with all the phenomenological character that it has is what constitutes its having the phenomenological character that it has. In an ordinary human case, the phenomenological character of a perceptual experience that is immediately known just in being had will be something of the *there-is-a-cow-under-a-tree-in-a-field* kind—nothing whatever to do with the 'merely sensory' content of the Myth.

I don't suppose Strong and the Sellarses would approve of this ('non-dual') use of 'know', and some philosophers today use 'know' in such a way that they can no longer easily hear—or hear at all—its validity. It exists nonetheless, and has a valuable use; and the present point, again, is simply that it has nothing whatever to do with the Myth, which is indeed a myth.

10 'The mechanism of givenness'

The critical realists insist that it's necessary 'to distinguish sharply between the sense-impression and the datum' (Strong, 1940: p. 234, see also Strong 1939: p. 395): between the theoretically posited mere or bare sense-impression and *the given: what is given* in perceptual experience. The question is then: 'How does this way of experiencing things arise?' What, in Strong's striking expression, is 'the *mechanism of givenness*' (1918: p. 111)? How is it that the things that are immediately given to us in experience are rich things like *there-is-a-cow-under-a-tree-in-a-field*?

The first answer is: evolution. Evolution has worked long and hard on our interface with the world, our 'GUI' or graphical user interface. Strong's second and more specific answer is unequivocally enactivist: it gives an essential role to our tendency to react bodily to our experience in certain ways: our experience of motor tendencies, muscular sensations resulting from incipient or actual muscular movements, where these include things like the micromovements involved in 'converging and accommodating the eyes' (Strong, 1940: p. 234). He argues that possession and deployment of the idea of an external world, and indeed all intentionality with respect to the external world, all the *intent* in that intentionality, is essentially dependent on, utterly inseparable from, our experience of muscular sensations and motor tendencies. We need to recognize

the essential importance of movement or the tendency thereto as a factor in cognition. The neglect of the motor side of the mind ... appears as a grave omission (1923: p. 24)

A sound [for example] is ordinarily heard as an event outside us. Now the externality cannot be properly said to be heard, or [merely] sensible; and I suggest that it is brought before us by the motor tendencies that accompany the hearing of the sound the external sound as heard ... is not purely sensible, being due to an auditory sensation and a tendency to motion combined ... it is not a datum of

sensation at all, but a datum, as we may say, of *apprehension*, mediated partly by sensation and partly by movement' (1923: pp. 1–2).

The same goes for vision:

the externality here can be easily explained if we recall, first, that when we see an object at a certain distance we look towards it and accommodate the eyes, and, secondly, that we instinctively prepare ourselves for action, if action should be called for, with reference to an object at that point (1923: 4)

Strong maintains and refines this position consistently throughout his career. In his last publication he writes that 'the sense-impression and the motor reaction are inseparably joined in the production of vision' (1940: p. 235), i.e. in our actually seeing an object. On this view you cannot properly be said to see an object at all if you have only the sensory impressions—even if they're appropriately caused by the object.

Strong might be thought to be at some risk, here, of going too far. It's natural to think that the fact that the datum essentially transcends the sensation, in ordinary perceptual experience, is not due only to the inseparable co-presence of the motor tendencies. Surely there must be more to be said on the irreducibly or more narrowly cognitive or conceptual side of things?

Well, Strong does say that the motor tendencies are only 'a factor in cognition'. Even so, when he says that the 'externality' of a sound is 'brought before us' by the motor tendencies, it seems necessary to recognize some distinction between the sense in which this may be said to be true of a dog or a crow and the sense in which motor tendencies play a part in a fully conceptually articulated (e.g. adult human) conception of an external world.

I think that Strong does go too far at one point—when he says that 'reference to the object is conferred on [the visual sense-impression] exclusively by the motor reaction of looking and of converging and accommodating the eyes' (1940: p. 234). It's implausible to suppose that possession of such motor/action tendencies is an absolutely metaphysically necessary condition of the possibility of having a genuine conception of an external world: of having, more generally (in Kantian-P. F. Strawsonian phrase), experience that has the character of being experience of an ordered objective world whose order is distinct from the subjective order of one's experiences. I think that the 'Weather Watchers' show otherwise. 36 And while motor tendencies and reactions are surely fundamental in the human case, and no doubt in all biologically evolved cases, there is a question about the nature of this fundamentality. On one view, which one might call the ontogenetic view, a human being would not and probably could not acquire a fully fledged conception of an objective external world without some sort of actual experience of movement relative to other things, and indeed of action. On another view, the phylogenetic view, although possession of the capacity and tendency to acquire a fully fledged conception of an objective external world requires that experience of movement and action feature quite fundamentally in the evolutionary history of the species, it

³⁶ Strawson (1994: §9.5). Others disagree: see e.g. Overgaard and Grünbaum (2007).

doesn't strictly require it in any given individual—one who is paralysed at birth say, or even (we must perhaps suppose) in the womb. The innate conceptual tendency of a human being to form a conception of an external world, tuned by aeons of adaptive ancestral motility, might possibly be so strong as to be activated even in the absence of all ordinary cues from motor experience.

11 Empiricism—ontogenetic and phylogenetic

This is an empirical question, which we don't need to answer. And whatever the answer, I think we can embrace a suitably phylogenetic version of the classical empiricist conception of the given—and not just as a useful teaching story. As a result of processes of evolution by natural selection over billions of years, sensory impacts on successive generations of organisms give rise to creatures that are innately disposed to react to sensory inputs in such a way that what is immediately experientially given to them in perception is always far more than the bare sensory inputs themselves. Work in developmental psychology by Elizabeth Spelke and others shows that human infants are born with extremely powerful and highly specific innate expectations—reactive dispositions—that are certainly not derived from (even if they are activated by) the relatively small number of sensory inputs they have received in their brief individual courses of development.³⁷ Classical ontogenetic empiricism, which supposes that individual human beings start out as mental 'blank slates' and build the adult experience/conception of the world out of merely or purely sensory inputs, is wholly and hopelessly false. It's the pure form of the Ur Myth. The phylogenetic version of empiricism allows us to give sensory inputs a foundational place in an account of what is immediately given in perceptual experience without falling into any such version of the Myth.

The point about innate mental structures was well known to Plato. It was neatly put by Leibniz when he accepted the first half of the old empiricist slogan 'nihil in intellectu quod non prius in sensu' while adding a crucial extra clause: 'nisi intellectus ipse'.³⁸ There is nothing in the mind or intellect that wasn't previously given in sense experience, except the mind or intellect itself with its hugely complex innate structure—designed by God, in Leibniz's official view, and by evolution, in our view.³⁹

The upshot is clear, when it comes to the Strongian given: there is, as Kant well understood, a very large and entirely naturalistically respectable sense in which we make the given.

Conclusion

I've endorsed a use of 'the given' that allows us to say that the given, in a particular case of veridical visual experience, is *a cow under a tree in a field*. In so doing I've gone beyond the important but more restricted Strongian use, according to which what

³⁷ See e.g. Spelke (1990, 1994), Spelke and Hermer (1996). Compare Strong (1934: p. 318). I'm drawing here on Strawson (1989: §23.4).

³⁸ Leibniz's precise words are 'nihil est in intellectu, quod non fuerit in sensu, excipe: nisi ipse intellectus' (c1704: §2.1.2).

³⁹ Locke nicely acknowledges that what is immediately phenomenologically given is far more than merely sensory even as he adheres in principle to the ontogenetic account. See Locke (1689: §2.9.8).

is given, in such a case, is identical to what could be given in imagination or hallucination: *cow-under-a-tree-in-a field-ishness*, or *there-is-a-cow-under-a-tree-in-a-field*, but not *a cow under a tree in a field*—i.e. not an actual cow under an actual tree in an actual field.⁴⁰

Strong agrees—to say it one more time—that a cow under a tree in a field is known in this case, directly known, directly perceived, directly apprehended; but it is not given. 'Nothing is ever given except data' (1934: p. 314). Many philosophers have grown used to saying that the cow itself is given. I want to say this too. All I ask is that we see that Strong's different use is clear and extremely well motivated. It's a terminological matter; it can't be said to be wrong (we tend to cathect uses of words intensely, in such a way that other people's uses seem plain wrong). My current more inclusive use allows me to agree with Strong that everything that he says is given is given, even while holding—with many today—that more is given: a cow under a tree in a field.

This more inclusive use may be easily taken up into the still more inclusive use that I favour all things considered: the—appropriately enactive—(Michelle) Montaguvian use given in §6. The Montaguvian use not only moves outward from Strong, extending the realm of the given firmly into the surrounding world, in holding that the actual cow under the actual tree in the actual field is part of what is given. It also moves inward: it points out that the greenness of the grass considered specifically as a quality of the sensory experience (the greenness that is not out there in the world, as we know from Science 101) is part of what is given, given in the having of experience; as indeed, and of course, it is, although it is not then given as a quality of sensory experience apprehended as such by the subject.

All that remains to be said is that acknowledging this last and obvious truth has nothing to do with the Myth.⁴¹

17

⁴⁰ The specification of the corresponding virtual-reality case introduces currently unimportant complications about the content of natural-kind terms like 'cow'.

⁴¹ Thanks to Michelle Montague and two anonymous referees.

References

Albahari, M. (2019). Perennial idealism: A mystical solution to the mind-body problem. *Philosophers' Imprint*, 19(44), 1–36.

Clark, A. (1997). Being there. MIT Press.

Dewey, J. (1896). The reflex arc concept in psychology. *Psychological Review*, *3*(4), 357–370.

Dewey, J. (1907) 'The Control of Ideas by Facts III'. *The Journal of Philosophy* 4/12: 309–319

Drake, D. (1925). Mind and its place in nature. Macmillan.

Drake, D. (1928). That elusive doctrine of essence. *The Philosophical Review, 37*(1), 53–71.

Hatfield, G. (2011). Transparency of mind: The contributions of Descartes, Leibniz, and Berkeley to the genesis of the modern subject. In H. Busche (Ed.), *Departure for Modern Europe: A Handbook of Early Modern Philosophy (1400–1700)* (pp. 361–375). Felix Meiner Verlag.

Hofmann, D. (2019). The case against reality: Why evolution hid the truth from our eyes. (London: Penguin).

Hume, D. (1748–51/1999). *An enquiry concerning human understanding*. ed. T. L. Beauchamp (Oxford: Oxford University Press).

Leibniz, G. C. (1704/1996). New Essays on Human Understanding, ed. and trans. J.

Bennett and P. Remnant. (Cambridge: Cambridge University Press).

Locke, J. (1689–1700/1975). *An Essay concerning Human Understanding*, ed. P. Nidditch (Oxford: Clarendon Press).

McDowell, J. (1998/2009). Having the World in View. In *Having the World in View* (Cambridge, MA: Harvard University Press).

Montague, W. P. (1938). Mr. C. A. Strong's Creed for Sceptics. *The Journal of*

Philosophy, 35, 572–580. Montague, M. (2010). The content of perceptual experience.

In Beckermann, A., B. McLaughlin & S. Walter (Eds.) Oxford Handbook of the Philosophy of Mind (Oxford: Oxford University Press).

Montague, M. (2016). The given. (Oxford: Oxford University Press).

Nietzsche, F. (1882–7/2001). *The Gay Science* trans. J. Nauckhoff (Cambridge: Cambridge University Press).

Nietzsche, F. (1885–8/2003). *Writings from the Late Notebooks*, trans. K. Sturge, ed. by Rüdiger Bittner (Cambridge: Cambridge University Press).

Noë, A. (2004). Action in perception. (Cambridge, MA: MIT Press).

Overgaard, S., & Grünbaum, T. (2007). What do weather watchers see? Perceptual intentionality and agency. *Cognitive Semiotics* 0, 8–31.

Quine, W. V. (1951). Two dogmas of empiricism. *The Philosophical Review*, 60, 20–43.

Reid, T. (1764/2000). *An Inquiry into the Human Mind*. In Brookes D. (Ed.) (Edinburgh: Edinburgh University Press).

Richardson, J. (2008). Nietzsche's New Darwinism. (Oxford: Oxford

University Press). Russell, B. (1940). An inquiry into meaning and truth.

(London: George Allen and Unwin).

Schopenhauer, A. (1819–1859/2010). *The World as Will and Representation*, trans. J. Norman et al. (Cambridge: Cambridge University Press).

Sellars, R. W. (1932). The philosophy of physical realism. (London: Macmillan).

Sellars, W. S. (1954). Physical realism. Philosophy and Phenomenological Research,

15(1), 13–32. Sellars, W. S. (1956). Empiricism and the Philosophy of Mind. In Feigl,

H., & M. Scriven (Eds.), *Minnesota Studies in the Philosophy of Science* (pp. 253–329, vol. I, Minneapolis, MN: University of Minnesota Press).

Sellars, W. S. (1956/1997). *Empiricism and the Philosophy of Mind*. In Brandom R., (Ed.) (Harvard University Press).

Sellars, W. S. (1963/1991). *Science, Perception and Reality* Atascadero, CA: Ridgeview Publishing Co.

Sellars, W. S. (1965). Scientific Realism or Irenic Instrumentalism: A Critique of Nagel and Feyerabend on Theoretical Explanation. *Boston Studies in the Philosophy of Science 2*, ed. R. Cohen and M. Wartofsky

Sellars, W. S. (1981). The Lever of Archimedes. Foundations for a Metaphysics of Pure Process, The Monist, 64(1), 3–36.

Spelke, E. (1990). Principles of object perception. Cognitive Science,

14, 29–56. Spelke, E. (1994). Initial knowledge: Six suggestions.

Cognition, 50, 431–445.

Spelke, E., & Hermer, L. (1996). Early cognitive development: Objects and space. In Gelman, R., & T. Kit-Fong et al (Eds.) *Perceptual and Cognitive Development* (San Diego: Academic Press).

Sprigge, T. L. S. (1995). Santayana (London: Routledge).

Strawson, G. (1986). Freedom and belief (Oxford: Clarendon Press).

Strawson, G. (1989). The secret connexion. (Oxford: Clarendon

Press). Strawson, G. (1994). *Mental reality* (Cambridge, MA: MIT Press).

Strawson, G. (2003/2008). Real materialism. In G. Strawson *Real materialism and other essays* (pp.

19–51, Oxford: Oxford University Press, 2008).

Strawson, G. (2011). Cognitive phenomenology: real life. In Bayne T., & M. Montague (Eds.) *Cognitive Phenomenology* (Oxford: Oxford University Press).

Strawson, G. (2020). What does "physical" mean?. In Seager, W. (Ed.) *The Routledge Handbook of Panpsychism* (pp. 317–339, London: Routledge).

Strawson, P. F. (1979/2011). Perception and its objects. In Montague, M., & G.

Strawson (Eds.) Philosophical Writings (Oxford: Oxford University Press).

Strawson, P. F. (1985). Skepticism and naturalism (New York: Columbia

University Press). Strong, C. A. (1896). Consciousness and time. *The Psychological Review*, *3*(2), 149–157.

Strong, C. A. (1908). Substitutionalism. In *Essays Philosophical and Psychological in Honor of William James* (New York: Longmans, Green and Co).

Strong, C. A. (1912). The nature of consciousness III. *The Journal of Philosophy*, 9, 589–603.

Strong, C. A. (1918). *The origin of consciousness: An attempt to conceive the mind as a product of evolution*. Macmillan.

Strong, C. A. (1923). A theory of knowledge (London: Constable).

Strong, C. A. (1930). Essays on the natural origin of mind. (London:

Macmillan). Strong, C. A. (1931). 'Is perception direct, or representative? *Mind*, 40, 217–220.

Strong, C. A. (1934). A Plea for substantialism in psychology. *The Journal of Philosophy, 31*, 309–328. Strong, C. A. (1936). *A creed for sceptics* (London: Macmillan).

Strong, C. A. (1939). The sensori-motor theory of awareness. *The Journal of Philosophy*, *36*, 393–405. Strong, C. A. (1940/1941). Final observations. *The Journal of Philosophy*, *36*, 233–243.

Washburn, M. F. (1916). *Movement and Mental Imagery* (Boston, MA: Houghton Mifflin).

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The embodied mind cognitive science and human experience* (Cambridge, MA: MIT Press).