

A SHORT HISTORY OF PHILOSOPHICAL THEORIES OF CONSCIOUSNESS IN THE 20TH CENTURY

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Introduction

Philosophy in the 20th century began and ended with an obsession with the problems of consciousness. But the specific problems discussed at each end of the century were very different, and reflection on how these differences developed will illuminate not just our understanding of the history of philosophy of consciousness, but also our understanding of consciousness itself.

An interest in the problems of consciousness can be found in at least three movements in early 20th century philosophy: in the discussions of perception and realism by G.E. Moore and Bertrand Russell; in the related discussions of realism and pragmatism in America, in the period between William James and C.I. Lewis; and in the phenomenological movement started by Edmund Husserl. Two common themes in all these movements are: (i) that consciousness is a central or defining feature of the mind, and (ii) consciousness and thought (or intentionality) are interrelated phenomena not to be discussed in isolation from one another. The problem of consciousness in those days was the problem of the nature of our access to the mind-independent world.

By the end of the century, the central concern of theories of consciousness in analytic philosophy was the question of physicalism, and the problem of consciousness had become the problem of explaining how any physical thing could be conscious. Moreover, consciousness was not considered to be the essential feature of the mental, and thought (or intentionality) and consciousness were typically treated as distinct, separable phenomena. Both this conception of consciousness and its perceived relation to the rest of the mind are very different from the conception to be found at the beginning of the century. The aim of this chapter is to explain how this change came about.

Thought, perception and the “given”

It is a truism of the history of 20th century philosophy that what came to be called analytic philosophy began in Cambridge with the “revolt against idealism” by Bertrand Russell and G.E. Moore. At the heart of this revolt was the insistence on the mind-independence of the objects of thought. But this insistence was also intertwined with assumptions about consciousness. In one of the seminal texts of early analytic philosophy, “The Refutation of Idealism”, Moore argued that thought and sensation “are both forms of consciousness, or to use a term that seems to be more in fashion just now, they are both ways of experiencing” (1903: 437). He then went on to derive anti-idealist conclusions from what he took to be manifest facts about experience.

Moore considers an experience of green and an experience of blue, and asks how they differ and how they resemble each other. He calls the respect in which they differ, the “object” of the experience and the respect in which they are the same, “consciousness” (“without yet attempting to say what the thing I so call is” 1903: 444). He acknowledges that consciousness itself is hard to identify by introspection. In a famous passage, he writes:

that which makes the sensation of blue a mental fact seems to escape us; it seems, if I may use a metaphor, to be transparent — we look through it and see nothing but the blue; we may be convinced that there is something, but what it is no philosopher, I think, has yet clearly recognised. (1903: 446)

But the fact that we find consciousness itself so hard to identify should not make us dismiss it.

Philosophers miss this relation because:

the moment we try to fix our attention upon consciousness and to see what distinctly, it is, it seems to vanish: it seems as we had before us a mere emptiness. When we try to introspect the sensation of blue, all we can see is the blue: the other element is as if it

were diaphanous. Yet it can be distinguished if we look attentively enough, and if we know that there is something to look for. (1903: 450)

The view Moore is opposed to is what he calls “the content theory”, which conceives of the experience of blue on the model of substance and quality (alternatively: object and property). On this theory, perceived blue is conceived of as a “quality of a thing” (1903: 448). For contemporary readers, it is important to bear in mind that this use of the word “content” is entirely different from today’s use: from at least the 1980s onwards, the word “content” has been standardly used to refer to representational features of experience. Moore’s use of the word makes “content” mean something closer to what we now know today as “qualia”: the intrinsic conscious properties of the experience. The content theory, in Moore’s sense, implies that if an episode of awareness is an awareness of blue, there has to be a “blue awareness” (1903: 450). Moore thinks this is absurd, and one of the sources of the errors of idealism. Moore seems to think that once we reject the absurd “content theory” and recognise the distinctness of the experience and its object, then we see what is wrong with idealism: “there is, therefore, no question of how we are to ‘get outside the circle of our own ideas and sensations’. Merely to have a sensation is already to be outside that circle. It is to know something which is as truly and really not a part of my experience” (1903: 451).

As Thomas Baldwin points out, Moore soon realised that “more needs to be said to handle cases in which something which is not in fact blue looks blue” (Baldwin 2010). This led to Moore’s lengthy investigation of whether the objects of experience — which he called “sense data” — are mind-independent or mind-dependent. This question became a preoccupation of the philosophy of perception for some decades, until the whole “sense data” way of thinking was widely abandoned in the 1950s. What lay behind this whole sense-data tradition was not, as some have supposed, a foundationalist epistemology or a concern with refuting scepticism, but a particular conception of consciousness: the “act-object” conception. According to this conception, conscious states and episodes are essentially relations: an “act” relating the subject of the state to its “object” (see Martin 2000). What is “given” in experience (the *datum*, plural: *data*) is the object or objects.

For present purposes, two points about Moore's discussion are especially important. First, for Moore, sensing is a form of consciousness, but thought is a form of consciousness too: his "true analysis of a sensation" applies to thought as well as to sense experience. Moore therefore believed in something like what is now called "cognitive phenomenology": apprehending a proposition is an "act of consciousness which may be called the understanding of meaning" (Moore 1953: 57-9; cf. Tennant 2006). Second, Moore held that "a sensation is, in reality, a case of 'knowing'". The relation we call "being aware of" or "experiencing something" is "just that which we mean in every case by 'knowing'" (1903: 449). As we will see, both these claims about consciousness came to be rejected later in the 20th century.

Moore's emphasis on both the centrality of consciousness was shared both by the emerging science of psychology and by the early phenomenologists. Wilhelm Wundt, whose *Principles of Physiological Psychology* (1874) was one of the founding texts of the discipline, assumed that consciousness was the principal subject-matter of psychology. George Trumbull Ladd, who founded the Psychological Laboratory at Yale in 1892, defined psychology as the "description and explanation of states of consciousness *as such*". William James is reported to have agreed with this definition (Güzeldere 1997). The British psychologist and philosopher G.F. Stout defined psychology as "the science of the processes whereby an individual becomes aware of a world of objects and adjusts his actions accordingly" (1899: 4). Awareness is consciousness, and psychological processes are those that make awareness possible. Stout therefore distinguishes between the psychological — everything that is relevant to the processes whereby an individual becomes aware of the world — and the psychical, or the facts of consciousness themselves (1899: 7). The psychological is whatever *contributes* to the creation of mental life, so much of the psychological is unconscious. The psychical in "the proper sense" is that which in some way enters into consciousness (1898: 9). In this, Stout registers his agreement with the American psychologist and editor of the famous *Dictionary of Philosophy and Psychology*, J.M. Baldwin, that consciousness is "the common and necessary form of all mental states ... it is the point of division between mind and not-mind" (Stout 1899: 8). However, like Moore, Stout argued that no definition of consciousness is possible. "What is consciousness?" he asks, and in a striking non-sequitur, answers: "Properly

speaking, definition is impossible. Everybody knows what consciousness is because everybody is conscious” (Stout 1899: 7).

Edmund Husserl shared the view that consciousness was a fundamental feature of all mental phenomena. The Phenomenological movement he initiated often claimed its inspiration in Franz Brentano’s classification of all mental phenomena as intentional (Brentano 1874). Brentano, like Wundt and other psychologists of the day, had assumed that all mental phenomena are conscious — in his terminology, they all involve “presentation” (*Vorstellung*). For Husserl, the “the comprehensive task of constitutive phenomenology” is the task of “elucidating in their entirety the interwoven achievements of consciousness which lead to the constitution of a possible world” (*Experience and Judgement* 1948: 50). Husserl’s concern was with the (“transcendental”) conditions that make it possible for there to be a world for the subject; and for him, there being a world for the subject is the same as things being present to consciousness (see Poellner 2007: §2). The fundamentality of consciousness was a persistent commitment of the phenomenological tradition (see for example, Jean-Paul Sartre’s (1943) critique of the idea of unconscious intentionality).

As well as the claim that consciousness is definitive of all mental phenomena, these early 20th century thinkers held that consciousness involves objects (however they are to be ultimately understood) appearing or present or being “given” to consciousness. Moore claimed that every experience “from the merest sensation to the most developed perception of reflexion” involves “that peculiar relation which I have called ‘awareness of anything’ ... this is in fact the only essential element in an experience” (1903: 453). H.H. Price, who had studied with Moore, also called the relation of “being given” a “peculiar and ultimate manner of being present to consciousness” (Price 1931: 3). As the term “sense-data” suggests, then, consciousness is givenness (Crane 2000).

This is not to say, of course, that all philosophers of the era thought of givenness in the same way. The Harvard philosopher C.I. Lewis, in his influential work *Mind and the World Order* (1929) argued for a distinction between the given and its properties or qualities (which he called “qualia”) on the one hand, and the way the given is interpreted or conceptualised by the mind on the other. We are conscious of the qualia that are given to us, but we have no *knowledge* of them, according to Lewis, because “knowledge always transcends the immediately given” (Lewis 1929:

132). Whenever we attempt to describe a quale we must necessarily conceptualise it, and this inevitably changes what we are aware of. Qualia can only be identified indirectly by describing their place in a relational structure, which allows the possibility of inverted qualia: intrinsically different qualia could play the same role in the network of relations (1929: 124). The given is, in this sense, ineffable. As M.G.F. Martin (2003) has pointed out, this is significantly different from the sense-datum theory, which emphasised the non-conceptual, non-intellectual confrontation with an object in sense experience, the sense-datum. According to the sense-datum theory, perceptual consciousness consists in the relation to this object and is itself a form of knowledge. But in denying that awareness of the given (and its qualia) is a form of knowledge, Lewis “rejects a key element of the sense-datum tradition: sensing as an example of a simple, primitive, or unanalysable state of knowing which relates the knower to something independent of the mind, where the subject’s grasp of what is known is pre-conceptual” (Martin 2003: 529). Martin also notes that this aspect of the sense-datum view is also rejected by Husserl’s Phenomenology. Husserl thought there was a kind of sensory “matter” (*hyle*) in sense-experience, but he did not think that this matter was something that is perceived: “although Husserl allows a role for the matter of episodes of perceiving, such aspects are not given to a subject as objects of awareness – they are not candidates for knowledge in the way that sense-data are supposed to be” (Martin 2003: 529). Both Husserl and Lewis, then, rejected the idea that the sensory matter of consciousness was an object of awareness.

Whereas Moore and Husserl saw consciousness and thought (intentionality) as intertwined, it is tempting to see Lewis’s creation of his conception of qualia as a first step in the separation of consciousness from intentionality which became orthodox in late 20th century analytic philosophy. The idea that consciousness is something inexpressible, indefinable, inefficacious additional and separable from the rest of mental life — from judgements, concepts, beliefs, thoughts and so on — came to be the central theme of later discussions of consciousness. I will call this the “phenomenal residue” conception of consciousness. As I will now argue, the conception was not eliminated by the behaviourist revolution in psychology and philosophy; on the contrary, the main legacy of the behaviourist movement was to reinforce this conception.

The disappearance of consciousness: behaviourism and “raw feels”

In its early days, as we saw, scientific psychology was unequivocally the science of conscious phenomena. Early 20th century psychologists traced their origins back to the associationism of James Mill and Alexander Bain, and “association” was supposed to relate ideas, conceived of as conscious occurrences. The introspectionist school of Edward B. Titchener (who had studied with Wundt in Leipzig) attempted to use the detailed description of experience to describe its structure. There was a broad consensus that introspection was the correct method for psychology, and as William James commented, “everyone agrees that we there [i.e. in introspection] discover states of consciousness” (James 1890: 185).

James himself went on to reject the importance of consciousness in a famous paper published in 1904 called “Does ‘Consciousness’ Exist?”: “I believe that ‘consciousness’, when once it has evaporated to this estate of pure diaphaneity, is on the point of disappearing altogether. It is the name of a nonentity, and has no right to a place among first principles” (James 1904: 477). His actual point is less radical than it initially seems: he rejects consciousness as an “entity” but argues instead that it is a “function”, the function of knowing (1904: 478). But nonetheless, James’s rejection of any non-epistemic sense of “consciousness” is striking; in some ways it prefigures the rise of behaviourism (see Güzeldere 1997: 13).

Even during the heyday of consciousness in early 20th century psychology, there was a feeling that consciousness was mysterious, elusive and hard to understand or define. Titchener quoted Bain and the Cambridge psychologist and philosopher James Ward: “‘Consciousness’ says Professor Ward, ‘is the vaguest, most protean, and most treacherous of psychological terms’; and Bain, writing in 1880, distinguished no less than thirteen meanings of the word; he could find more today” (1915: 323-324). Introspectionism did not live long past Titchener’s death in 1927, collapsing partly under the weight of the unwieldy complexity of Titchener’s results — in his *Outline of Psychology* (1896), he had claimed that there were 44,000 elements in conscious experience — and partly because of the unclarity of the introspective method itself.

Psychology at this time (and indeed throughout the whole century) was very much preoccupied with its scientific status, and behaviourism seemed to grant it the scientific respectability it sought. The behaviourist phase in psychology lasted for at least three decades from the 1920s until the 1950s, and in the hands of Edward Thorndike, John B. Watson, Ivan Pavlov, B.F. Skinner, Clark Hull, E.C. Tolman (and others), it emphasised strict, “objective” measurement of behaviour as the only properly scientific method. Indeed, behaviour itself ultimately became the only serious subject-matter of scientific psychology. Watson was adamant that behaviourism would have nothing to do with consciousness: “Behaviorism claims that ‘consciousness’ is neither a definable nor a usable concept; that it is merely another word for the ‘soul’ of more ancient times” (Watson 1924: 3).

In standard introductions to the philosophy of mind, a distinction is typically made between “methodological” behaviourism and “analytical” behaviourism (see e.g. Maslin 2001, ch. 4). Methodological behaviourism is the psychological view that the scientific study of the mind can only proceed through the study of behaviour and its stimulus conditions; this view is of course compatible with there being aspects of the mind that science cannot study. Analytical behaviourism is the view that mental states are constituted by behaviour alone, or by dispositions to behave; this is a constitutive or metaphysical claim about the nature of mental states themselves., or perhaps a conceptual claim about mental concepts.

There are at least two difficulties with this way of classifying positions: first, the analytical behaviourist position, as described, is incredibly implausible. C.D. Broad classified such a behaviourism as a “silly” theory (1925: 6): “one which may be held at the time when one is talking or writing professionally, but which only an inmate of a lunatic asylum would think of carrying into daily life” (1925: 5). Second, and relatedly, it’s really not obvious that there have been any philosophical behaviourists in this sense. Watson’s remarks about consciousness might suggest that this was his view, but these remarks are better understood as a rhetorical flourish targeted against the dead-end of introspectionism, rather than as a substantive doctrine. (For a different perspective on behaviourism, see Amy Kind’s essay in the present volume.)

Sometimes Gilbert Ryle (1949) and Ludwig Wittgenstein (1953) are classified as analytical behaviourists. Certainly Ryle and Wittgenstein had in common their opposition to a picture of the mind which treats mental occurrences as private and “hidden” behind behaviour. Ryle himself explicitly opposed what he called the “official doctrine” that

when someone is described as knowing, believing or guessing something, as hoping, dreading, intending or shirking something, as designing this or being amused at that, these verbs are supposed to denote the occurrence of specific modifications in his (to us) occult stream of consciousness. (Ryle 1945, 17)

It is worth noting here that Ryle himself uses the word “consciousness” mostly for reflection on or knowledge about experience, rather than for experience itself; his references to the “stream of consciousness” are largely disparaging (see Ryle 1949: 155ff.).

Ryle’s alternative to the “official doctrine” was to focus philosophical attention on the ways in which we actually apply mental terms, and the standards employed or presupposed in these applications. These standards, he claimed, often require public and observable evidence for a mental ascription. But as Julia Tanney points out, “in focussing on what is observable, he does not commit himself to reducing what is observable itself to sequences of ‘muscular behaviour’” (Tanney 2014). Moreover, Ryle explicitly denied that he was a behaviourist, and a careful reading of his texts does not support the “philosophical behaviourist” reading. As his later work *On Thinking* made explicit, his declared aim was to steer a course between the “Category-howler of Behaviourism or the Category-howler of Cartesianism” (1979: 17).

Wittgenstein too was concerned to return to the “rough ground” (1953: §107) of real psychological ascriptions, and argued that claims made about so-called “inner” processes “stand in need of outward criteria” (1953: §580). Like Ryle, he tried to undermine what he saw as a mistaken picture of the mind which treats mental occurrences as essentially private and only contingently connected with their behavioural manifestations. Wittgenstein’s concept of a “criterion” was supposed to describe the conceptual (or “grammatical”) connection between mind and behaviour that

was more intimate than mere evidence or causal connection. Mental states may be *expressed* in behaviour, just as (e.g.) an interpretation of a piece of music finds its expression in the musical performance itself. But this is not the same thing as these states being identified with behaviour.

Wittgenstein's view is no more "analytical behaviourism" than Ryle's is; and like Ryle, Wittgenstein himself explicitly denied that he was a behaviourist.

The real influence of behaviourism on later philosophy of mind was felt at first in the work of the logical positivists (or logical empiricists), the philosophers of the Vienna Circle who attempted to develop a "scientific philosophy". The most influential of the logical positivists was Rudolf Carnap, whose influence was particularly strong on W.V. Quine, himself arguably one of the most influential analytic philosophers of the 20th century. Quine explicitly advocated some form of behaviourism in various writings. One way in which this expressed itself was in his explicit rejection of ideas like "sense-data", the "given" and "things before the mind" — ideas which, as we saw above, had dominated discussions of consciousness in the first few decades of the century in epistemology and the philosophy of mind (cf. also Sellars 1956). However, Quine's behaviourism was not an attempt to reduce mental states to behaviour — he is happy to acknowledge the reality of what he calls the "heady luxuriance of experience" (Quine 1981: 185). Rather, he rejected mental states as unscientific posits of a pre-scientific age. So Quine should not be classified as an "analytical" behaviourist in the usual sense.

Although the distinction between "methodological" and "analytical" behaviourism is difficult to sustain, it is related to a tension in actual behaviourist writings, between those that are prepared to acknowledge something like consciousness, but deny that it can be scientifically studied, and those that declare there to be no such thing. This distinction does not line up exactly with the distinction between methodological and analytic behaviourism, since those who declare there is no such thing as consciousness do not make any specific proposal about how conscious mentality is related to behaviour (as analytical behaviourists were supposed to have done). All they do is dismiss talk of consciousness as meaningless, unverifiable and unscientific. This does not amount to any genuine philosophical doctrine.

However, scientific resistance to the study of consciousness outlived the official decline and collapse of behaviourism. As Daniel Dennett pointed out as late as 1978, “one of philosophy’s favorite faces of mentality has received scant attention from cognitive psychologists, and that is consciousness itself: full-blown, introspective, inner-world, phenomenological consciousness ...one finds not so much a lack of interest as a deliberate and adroit avoidance of the issue” (1978: 149). This was not obviously because all psychologists were still behaviourists, or that the behaviourists actually *denied* the existence of consciousness: “off the printed page” Julian Jaynes commented, “behaviourism was only a refusal to talk about consciousness” (Jaynes 1976: 15). Rather, the dominant view seems to be that one could concede that there is *something* to all this talk about consciousness, but it is not a subject-matter for grown-up scientific psychologists.

This is the view we find in the work of E.C. Tolman, who famously argued that “everything important in psychology ... can be investigated in essence through the continued experimental and theoretical analysis of the determiners of rat behavior at a choice point in a maze” (Tolman 1938: 34). In his 1932 book *Purposive Behaviour in Animals and Men*, Tolman introduced the term “raw feels” as a name for what therefore lies outside the scope of scientific psychology:

sensations, says the orthodox mentalist, are more than discriminanda-expectations, whether indicated by verbal introspection or by discrimination-box experiments, They are in addition immediate mental givens, “raw feels”. They are unique subjective suffusions in the mind. (Tolman 1932: 250-1; see also Farrell 1950: 174)

Given Tolman’s rejection of mentalism, this sounds as if he is rejecting raw feels; but in fact his view was that science cannot settle the question of whether they exist:

we never learn whether it feels like our red or our green or our gray, or whether indeed, its “feel” is perhaps *sui generis* and unlike any of our own.... Whether your raw feels are or are not like mine, you and I shall never discover. ... If there be raw feels correlated with such discriminanda expectations, these raw feels are by very definition “private” and not capable of

scientific treatment. And we may leave the question as to whether they exist, and what to do about them, if they do exist, to other disciplines than psychology — for example, to logic, epistemology and metaphysics. And whatever the answers of these other disciplines, we, as mere psychologists, need not be concerned. (Tolman 1932: 252-3)

The idea that consciousness might consist in ineffable qualities which are inaccessible to science and whose nature is undetectable by others is an idea which we first found in the work of C.I. Lewis (*cf.* his “qualia”) and one which permeates philosophical discussions of consciousness later in the century, as we shall see.

The significance of behaviourism for the philosophy of consciousness in the 20th century does not lie in any plausibility that the doctrine might have had as a substantial thesis about the nature of mind and consciousness. Rather, its significance lies in the fact that it generated and helped to sustain a conception of most of mental life as *not essentially involving consciousness at all*. And this conception came to be accepted even by behaviourism’s most severe critics. Here is Jerry Fodor, for example, writing in 1991:

It used to be universally taken for granted that the problem about consciousness and the problem about intentionality are intrinsically linked: that thought is ipso facto conscious, and that consciousness is ipso facto consciousness of some or other intentional object... Freud changed all that. He made it seem plausible that explaining behaviour might require the postulation of intentional but unconscious states. Over the last century, and most especially in Chomskian linguistics and in cognitive psychology, Freud’s idea appears to have been amply vindicated... Dividing and conquering — concentrating on intentionality and ignoring consciousness — has proved a remarkably successful research strategy so far. (1991: 12)

The reference to Freud is largely rhetorical, and may simply be due to the journalistic context in which these remarks appeared. Although it is often claimed that Freud changed our conception of the mental with his discovery of unconscious mentality, Freud’s specific impact on analytic philoso-

phy has been minimal. (In fact, the attribution to Freud of the discovery of the unconscious is itself very misleading: see e.g. Whyte 1960; Manson 2000.) A more plausible hypothesis, to my mind, is that what Fodor calls the divide and conquer strategy is a result of the conception of consciousness which was introduced by behaviourism. If this is right, then there is an irony in the fact that the officially anti-behaviourist movements in cognitive psychology and Chomskian linguistics should have embraced a conception of consciousness which “while granting the reality of consciousness, maintains it to be quite inessential to mind, psychology or cognition — and at most, of some peripheral or derivative status or interest” as Charles Siewert puts it (Siewert 1998: 3; see also Siewert 2013). As we will see, this tendency is also central to the physicalist or materialist rejection of behaviourism.

Physicalism and the explanatory gap

The main preoccupation of the philosophy of mind in the second half of the 20th century was the question of materialism or physicalism. Materialism was not a 20th century invention, of course: in the early modern era, its origins are recognisable in Hobbes and Cartesians like La Mettrie, and materialist doctrines were popular in 19th century Germany (see Gregory 1977). The logical positivists had formulated a doctrine that they called ‘physicalism’ (see Carnap 1932; 1955) as a doctrine about the language of science: it says that all truths can be expressed in physical language (that is, in the language of physics). But in keeping with Carnap’s general attitude to ontology, this was supposed to be a doctrine purely about a choice of linguistic framework, and not about the world.

W.V. Quine’s (1943) rejection of the analytic/synthetic distinction which he took to lie behind Carnap’s philosophy led to a more direct approach to ontological questions (see Hookway 1988). Quine’s view was that ontological questions could be considered on all fours with scientific questions about what there is. Another influential doctrine of Quine’s was his naturalism: his belief that philosophy was not just “continuous” with science but that all ontological questions are really questions for science. Although Quine himself remained a methodological behaviourist in linguistics and in psychology (1990: 37), it is worth pointing out that the combination of naturalism and the

straightforward attitude to ontology does not entail behaviourism. Indeed, this combination of views led to a hugely popular non-behaviourist (or “mentalist”) version of physicalism in the later decades of the 20th century.

A crucial movement here was the version of materialism which emerged in Australia in the 1950s (often known as “the identity theory”). In a pair of very influential papers, J.J.C. Smart (1959) and U.T. Place (1956) proposed that mental states and processes should be identified with states and processes in the brain. This form of materialism was put forward as an empirical hypothesis, akin to the hypothesis that lightning is an electrical discharge, or that heat is the motion of molecules.

Smart’s paper is standardly cited as a revolutionary moment in this history of the mind-body problem, freeing those with scientific or materialist tendencies from the twin strangleholds of behaviourism and Wittgensteinian obscurantism. Of course, originality in philosophy rarely takes this form. The idea that mental states and neural states (or processes or events) are literally identical was not invented by Smart, but had been in the air for a while. Smart himself always gave credit to Place (1956) and Feigl (1958) for explicit formulations, and he identified related views in Carnap and Reichenbach. Some have taken the Australian-British metaphysician Samuel Alexander to have defended the identity theory in the early part of the century, though it is hard to see how this is compatible with his defence of the “emergence” of the mental (see Thomas 2013). And as Place pointed out, the psychologist E.G. Boring, a follower of Titchener, had claimed explicitly in 1946 that “neural process and sensation are identical” (see Place 1990).

Smart was concerned in the 1959 paper with sensations, and said little or nothing about thoughts or other conscious episodes. He considered various objections to the identity theory, the most powerful of which he credited to Max Black. This is the objection that even if the identity theory does identify sensations with brain processes, how can it deal with the “phenomenal qualities” of those processes? For example, even if having an orange after-image is a brain process, where does this leave the qualitative “feel” of this after-image — its “orangey-ness”, as it were? Smart responded with what he called his “topic-neutral” analysis of attributions of phenomenal properties. It

is “topic-neutral” because the truth of the analysing claim is neutral on whether the property itself is physical or irreducibly “psychical”. This is Smart’s proposed analysis:

When a person says, “I see a yellowish-orange after-image” he is saying something like this:
“There is something going on which is like what is going on when I have my eyes open, am awake, and there is an orange illuminated in good light in front of me, that is, when I really see an orange.” (Smart 1959)

From the point of view of the present investigation, the interesting thing about Smart’s analysis is that he thinks this account explains

the singular elusiveness of “raw feels” —why no one seems to be able to pin any properties on them. Raw feels, in my view, are colorless for the very same reason that something is colorless. This does not mean that sensations do not have properties, for if they are brain-processes they certainly have properties. It only means that in speaking of them as being like or unlike one another we need not know or mention these properties. (Smart 1959)

These “phenomenal properties” of experience are elusive and ineffable, like Lewis’s qualia and Tolman’s raw feels. Smart’s conception of consciousness therefore has a close connection with the behaviourist’s “phenomenal residue” conception, despite the fact that he thinks (unlike the behaviourists) that a scientific account of consciousness can be given, by using the topic-neutral analysis. (Feigl (1958 section V) has a similar view of raw feels, which he equates with “qualia”.)

Smart’s topic-neutral analysis of mental concepts can be seen as an early attempt to develop the functionalist theory of mind, which treats mental states as characterised in terms of their typical causes and effects (cf. Armstrong 1968, Lewis 1972). Sometimes known as the “causal theory of mind”, functionalism became the dominant approach in the philosophy of mind in the 1970s and 1980s.

The most persistent objection to functionalism, posed famously by Ned Block and Jerry Fodor (1972) and then developed by Block (1978), is that it cannot handle the essence of consciousness, the familiar “qualitative feel”. Block and Fodor argued, with the use of a number of thought experiments, that a functionalist account of conscious states could be true of different creatures even if they had very different conscious experiences (“inverted qualia”) or no consciousness at all (“absent qualia”). Here the essence of consciousness is thought of as something that in its very nature eludes functionalist analysis: this is the phenomenal residue conception of consciousness, which we saw was epitomised in the notion of a raw feel. Indeed, Sydney Shoemaker, in a famous defence of functionalism against Block and Fodor’s attack, explicitly links Block’s objection to the view that functionalism “cannot account for the ‘raw feel’ component of mental states, or for their ‘internal’ or ‘phenomenological’ character” (Shoemaker 1975: 185).

Taking a broader view, Block’s criticism can be seen to belong to a kind whose most general form is found in Thomas Nagel’s classic paper “What is it like to be a bat?” (1974). Nagel begins with the statement that “consciousness is what makes the mind-body problem really intractable” (1974: 435). He then offers a famous definition of consciousness: “fundamentally an organism has conscious mental states if and only if there is something that it is like to *be* that organism — something it is like *for* the organism” and adds, “we may call this the subjective character of experience” (1974: 436). All reductive accounts of consciousness fail, Nagel argues, because “all of them are logically compatible with its absence” (1974: 436). Nagel illustrates his conclusion with the thought experiment that no matter what one knew about the mental life of a bat from an objective, scientific point of view, one would not thereby know what it was like to be a bat: facts about the bat’s consciousness.

Nagel’s description of consciousness in terms of the idea of “what it’s like” is vivid and compelling. (The idea had originally been proposed by B.A. Farrell (1950: 177) and T.L.S. Sprigge (1971: 167-8), as Nagel willingly acknowledged.) But it is important to emphasise that this idea does not by itself imply the phenomenal residue conception of consciousness. And nor does it imply what Lewis, Feigl and others meant by “qualia” (indeed, the words “quale” and “qualia” do not occur in Nagel’s article). This is worth stressing, because many standard introductions to the prob-

lem of consciousness equate “phenomenal consciousness” with “subjective experience” with “what it’s like” and with “qualia”. But there is nothing in the idea of subjective experience as such that requires that we think of it in terms of a phenomenal residue, as I characterised that idea in section 1 above.

Nagel did not argue against the truth of physicalism in his 1974 paper. Rather, he argued that although we have good reasons to think it is true, we cannot understand how it can be true. Frank Jackson, by contrast, used similar considerations to Nagel's to argue that physicalism is false. Jackson’s famous “knowledge argument” used the now famous example of an omniscient scientist, Mary, who knows all the physical information about seeing red — information expressible by physical science — but has never seen red (Jackson 1982). When she sees red for the first time, she comes to learn something new; therefore not all information is physical information. (Essentially the same argument was published in the same year by Howard Robinson (1982), and precursors of the argument can be found in Broad 1925, Russell 1927 and Feigl 1958.)

By the last decades of the century, physicalist theories of consciousness could be divided into the optimistic and the pessimistic. Among the pessimists were Nagel, who defended materialism at least until *Mind and Cosmos* (2012), although he insisted that the doctrine is unintelligible. Colin McGinn (1989) took inspiration from Nagel and from Noam Chomsky in defending his “mysterian” view that we are constitutionally incapable of solving the mind-body problem. From Nagel he took the idea that solving the problem requires explaining the “subjective” in “objective” terms. From Chomsky he took the idea that there might be contingent limits on our cognitive capacities, such that we are “cognitively closed” to some problems or what Chomsky calls “mysteries”: just as a dog is constitutionally incapable of understanding quantum mechanics, so we may be incapable of understanding the mind-brain relation (which on independent grounds, we know to obtain). Another pessimist is Joseph Levine, who coined the phrase “the explanatory gap” to describe the problem consciousness poses for materialism (Levine 1983). Levine argues that although we have good reason to think that some kind of materialism thesis is true, we do not have an explanation of the necessary connection that holds between the facts about consciousness and their underlying material bases. Levine’s conception of explanation is Hempel’s deductive-nomological conception:

to explain a phenomenon X is to derive propositions about X from other propositions about the explaining facts and about the laws of nature. Levine argues that Nagel's considerations show that there can be no such deduction. He attempts to close the explanatory gap in Levine (2000).

Among the optimists, Frank Jackson, whose conversion to materialism happened at some time before the mid-1990s, addressed head on the problem set in Levine's terms. Jackson (1998) follows Lewis in taking the essence of physicalism to be a global supervenience thesis: any possible world which is a minimal physical duplicate of the actual world is a duplicate *simpliciter* (cf. Lewis 1983). He also agrees with Levine that the materialist must explain why this necessary supervenience relation holds: it cannot be a brute fact, since there are no unexplained necessities in nature, on Jackson's view. He proposes explaining supervenience in terms of a functionalist conceptual analysis of mental concepts, in the style of Lewis (1972). By contrast, Robert Kirk (1994) skips the conceptual analysis step, arguing that strict implication alone between the physical and the phenomenal truths is sufficient to close the explanatory gap.

John Searle is a different kind of optimist. He thinks of the mind-body problem as a scientific problem, like the "stomach-digestion" problem (Searle 1992). There is no deep and mysterious metaphysical puzzle about how the stomach manages to digest food; and we should think in the same way about the brain and its mental activity. The analogy suggests that mind is the activity of the brain; but Searle does not pursue the analogy in that direction. Rather, his claim is that mental states are "caused and constituted" by what goes on in the brain. Consciousness is a basic biological fact about us and other conscious organisms; it should be part of the scientific worldview that there is "subjective ontology" (i.e. the ontology of consciousness) as well as "objective ontology". Searle denies that he is a materialist, because he wants to reject the mental/physical contrast, on the grounds that "mental" connotes "mental-as-opposed-to-physical", which he thinks loads the dice somewhat against a properly scientific understanding of consciousness. However, since no plausible version of materialism will accept that "mental" has this connotation, we can safely ignore Searle's claim that he is not a materialist.

For both optimists and pessimists, the central question for physicalism is how to account for consciousness. This question and a wide range of answers to it were summarised and systema-

tised in *The Conscious Mind* by David Chalmers (1996). An expansive and synoptic work, this book set the agenda for discussions of consciousness up to the end of the century and in the first decade of the 21st century. Three things about Chalmers's book are worth noting here: first, his conception of the problem of consciousness; second, his endorsement of the anti-physicalist arguments pioneered by Jackson; and third, his positive speculative theory of consciousness.

On the first point: Chalmers divides the study of consciousness into "easy" problems and the "hard" problem. Easy problems are, for example, those of explaining "the ability to discriminate, categorize, and react to environmental stimuli; the integration of information by a cognitive system; the ability of a system to access its own internal states; the focus of attention; the deliberate control of behavior" and others (Chalmers 1995: 200). We should not dwell on whether "easy" is the right word for these problems, many of which are very difficult indeed; the point is rather the contrast between these scientific questions and what Chalmers calls the "hard" problem of consciousness: the problem of explaining for any conscious state, why it is conscious at all.

Second, Chalmers thinks that there is no physicalist solution to the hard problem. As Nagel had emphasised, the conditions specified by all current materialist theories of consciousness are logically consistent with the absence of consciousness. If this is right, there can be no deduction from the facts about the physical basis of consciousness to the facts about consciousness. Following Kirk (1974), Chalmers dramatises this with the image of a "zombie": a creature who is a physical replica of a conscious creature, but who lacks consciousness. The easy problems could be solved for the zombie; but having solved these we would still be in the dark about what makes us differ from zombies.

Third, there is Chalmers's positive conception of consciousness. Chalmers thinks of consciousness as metaphysically or logically independent of its functional or physical basis, in a certain sense. He thinks that the facts about consciousness supervene on the physical facts as a matter of lawlike necessity, rather than metaphysical necessity. But later in the book he flirts with a version of panpsychism that he calls "panprotopsychism" — the idea that all matter is endowed with some kind of "proto-consciousness", whose coming together in organisms produces the conscious phenomena we experience. This seems to have the consequence that consciousness does

supervene on the physical after all, since any physical duplicate of our world would be a mental duplicate too; and zombies would be impossible. Paradoxically, then, panpsychism turns out to be a form of physicalism. (This may not be a problem on the version of panpsychism defended by Galen Strawson (2006); but for a contrasting view of panpsychism see Goff (forthcoming).)

My interest here is not in the truth of physicalism, nor in the arguments for and against it, but the various ways in which consciousness has been conceived. The different conceptions cluster around the different understandings of the invented term “qualia”. Literally the plural of the Latin word for quality (singular: “quale”), the word “qualia” came to dominate discussions of consciousness in the second half of the century. Jackson described himself in his 1982 paper as a “qualia freak”, and intended by this to express his anti-physicalist sentiments. He clearly did not mean by “qualia” exactly what C.I. Lewis meant (the ineffable properties of the immediately given), so what did he mean?

Broadly speaking, the term “qualia” came to mean two things in the philosophy of mind of the late 20th century. In one use of the term, to believe in qualia is just to believe in consciousness itself; the use of the term does not imply any particular theory of consciousness. To deny qualia, in this sense then, is to deny consciousness; and what sense can be made of this? But in another use, qualia are properties that are, in Michael Tye’s words, “intrinsic, consciously accessible features that are non-representational and that are solely responsible for [the] phenomenal character” of sensory experiences. In itself, this does not imply that qualia are non-physical, as Tye himself acknowledges (Tye 2013). What matters is that qualia are intrinsic properties of *sensory* experiences, they are non-representational (they do not represent anything outside themselves) and available to consciousness. Ned Block adds to this definition the claim that qualia “go beyond” the functional properties of mental states; so the existence of qualia is incompatible with functionalism. Indeed, Block claims that the existence of qualia is of great significance:

The greatest chasm in the philosophy of mind--maybe even all of philosophy-- divides two perspectives on consciousness. The two perspectives differ on whether there is anything in the phenomenal character of conscious experience that goes beyond the intentional,

the cognitive and the functional. A convenient terminological handle on the dispute is whether there are “qualia”, or qualitative properties of conscious experience. Those who think that the phenomenal character of conscious experience goes beyond the intentional, the cognitive and the functional believe in qualia. (Block 2003)

It should be clear, I hope, that this conception of qualia is the heir of the phenomenal residue conception of consciousness whose presence I have traced from C.I. Lewis, via the behaviourists, to Smart and Feigl. Consciousness conceived in terms of qualia is non-functional, non-intentional and intrinsic. Often qualia are purely sensory too, though Block does not say this explicitly here. The qualitative nature of experience, on this view, is explained by the instantiation of properties which Block vividly describes as “mental paint” properties. In this he employs an idea first mooted and then rejected by William James in 1904: “experience ... would be much like a paint of which the world pictures were made”.

However, the essence of the late 20th century debates about materialism and consciousness do not presuppose this substantial notion of qualia. Nagel’s 1974 argument does not presuppose any specific conception of consciousness, and *a fortiori* it does not presuppose qualia in Block’s sense. The same is true of the Jackson-Robinson knowledge arguments. All that these arguments presuppose is that there is such a thing as conscious experience (the experience of an alien creature like a bat, for example, or the experience of seeing red for the first time). They do not presuppose that conscious experience involves qualia in the substantial sense. So if consciousness poses a problem for materialism, this problem cannot be avoided by rejecting this controversial assumption about qualia.

Where the substantial notion of qualia gets a grip is in its application in the objections to functionalism. If qualia are essentially non-functional, as Block says, then obviously sameness of functional role will not suffice for sameness of qualia; and this is exactly what the inverted qualia thought-experiments are supposed to show. Sydney Shoemaker once observed that “belief in qualia often goes with belief in the possibility of ‘inverted qualia’” (Shoemaker 2007). It is clear that what he must mean by “qualia” is Block’s substantial notion, not the innocuous one. But does this

substantial notion of qualia, and the phenomenal residue conception of consciousness which it implies, have any independent plausibility? In other words, what reasons are there, independently of suspicion of functionalism, for thinking that consciousness should be conceived in this way? In the last section of this paper, I will address this question.

Consciousness, cognition and intentionality

Any theory of the ontological basis of consciousness — whether dualist, materialist or some other kind — must begin with some idea of what the phenomenon of consciousness is, and how it should be initially characterised. As we saw above, many early 20th century philosophers thought of consciousness in terms of the idea of “givenness”: the presentation to the subject of a special kind of object — e.g. sense-data or qualia. And over the course of the century, consciousness in the analytic tradition became conceived of as a primarily sensory phenomenon, with the sensory element itself conceived of as something inexpressible, indefinable, inefficacious and separable from the rest of mental life. This is what I am calling the “phenomenal residue” conception of consciousness. By the end of the century, it became common to think of states of mind as divided into two categories: the essentially unconscious “propositional attitudes” and the phenomenal residue of sensory qualia (see Crane 2003 for discussion).

One upshot of this picture is that conscious thought becomes very hard to make sense of. If consciousness is essentially a sensory phenomenon, to be thought of in terms of the instantiation of simple sensory properties, then conscious thinking, reasoning, imagining, day-dreaming and other intentional phenomena must be understood in terms of these properties. This is standardly done by conceiving of conscious intentionality in a composite way, as some kind of hybrid of unconscious intentional states and conscious qualia. (As we have seen, the phenomenological tradition, by contrast, connected consciousness and thought at the outset.) But is this the right account of conscious thinking, or of conscious intentionality in general?

In considering the relationship between consciousness and intentionality, there are two questions we need to address: first, can consciousness in general be understood in terms of inten-

tionality at all? And second, how should we understand conscious intentionality itself (e.g. conscious thinking)?

Taking the first question first, there have been two broad approaches which have attempted to understand consciousness in terms of intentionality. One treats consciousness in terms of the representation of mental states: to be a conscious state is to be the object of another (intentional) mental state. This is the *higher-order representation* or *higher-order thought* (“HOT”) approach (see Carruthers 2000, 2011; Rosenthal 2005; for reasons of space I ignore here the “same-order” or “self-representation” views, e.g. Kriegel 2010).

The other treats consciousness itself as a form of intentionality. Conscious states belong to a sub-category of intentional states; they are conscious in themselves, and not because they are the objects of higher-order states. This is *intentionalism* or *representationalism* (Tye 1995; Dretske 1995; Byrne 2001; Chalmers 2006; Crane 2009). I will consider these views in turn.

The HOT approach has been most fully developed by David Rosenthal (2005) but it has obvious affinities with earlier views: for example, Ryle’s conception of consciousness as introspection, and Armstrong’s idea of consciousness as a monitoring mechanism (“consciousness ... is simple awareness of our own state of mind” Armstrong 1968: 95). There are different versions of HOT theory. Some versions say that a first-order state is conscious only when one is actually thinking about it (Rosenthal 2005). Others say that one only has to have the disposition to think about the first order state (Carruthers 2000). Still others think of what is higher-order as a “perception” rather than a thought (Armstrong 1968, Lycan 1996).

Sometimes it is said that the appeal of the HOT theory derives from the idea that being conscious is always being conscious of something (see Lycan 2001). This is debatable. For it is natural to say that being aware of an object in one’s perceived environment (say) is an instance of “being conscious of something”. But according to the HOT theory, this is not so. For the only application of the notion of being “consciousness of” something which it allows is when one is conscious of one’s own mental state. As Rosenthal says, “the first-order state can contribute nothing to phenomenology apart from the way we’re conscious of it” (Rosenthal 2004: 32). So it is best not to let too much turn on the interpretation of the intuitive idea of “being conscious of” something.

Criticism of the HOT theory is not normally based on the rejection of the very idea of higher-order thought, or even of the idea that having a higher-order thought about a mental state could be a way of making that state conscious. Rather, the criticism normally comes from the idea that higher-order representation is not necessary for consciousness. (Peacocke 1993 argues that it is not sufficient either; but here I will focus on the objection to the necessity claim.) Many philosophers have argued strongly that some mental states (sensations, for example) are conscious in themselves and not simply because they are the objects of higher-order thought. For example, when one is paying close attention to some intellectual task, one may not be paying attention to, or thinking about, the lingering pain in one's lower back. But that pain is in your consciousness nonetheless. Although HOT theorists have responded to these kinds of complaint, they do linger persistently.

Ned Block has argued influentially that there is a fundamental distinction between two concepts of consciousness: access and phenomenal consciousness (Block 1995). A representation is "access conscious" when one can access it in thought, or it is available for being "broadcast" among other representations; and a state of mind is "phenomenally conscious" when there is something it is like to be in this state. One of the ways in which the HOT theory fails, on Block's view, is that it fails to take account of phenomenal consciousness in his sense. Since on Block's view, phenomenal consciousness can occur without access consciousness, and HOT theories in effect say that all consciousness is access consciousness, he claims to have some clear counterexamples to the HOT theory.

Block's distinction is certainly real, in the sense that every theory (with the exception of the HOT theory) attempts to account for the difference between a simple conscious state and thinking about one's conscious states. This is not the same as the distinction between consciousness and attention, since attention is normally conceived in terms of focussing on the objects of conscious experience, and not only on one's mental states. The distinction between consciousness and attention has been explored by philosophers as a way of making sense of the different ways in which one may be said to be conscious of something (see Mole, Smithies and Wu 2011; O'Shaughnessy 2000; Wu 2014; for the view that consciousness is attention, see Prinz 2013).

The mere idea that there are different kinds of consciousness, and that thinking about (or accessing) a state of mind is a different thing from that state's being conscious, is not (*pace* Carruthers 2011) a discovery of the late 20th century, but something which has been around for a while. We find it in G.F. Stout for example:

consciousness has manifold modes and degrees ... consciousness includes not only awareness of our own states, but these states themselves, whether we have cognisance of them or not. If a man is angry, that is a state of consciousness, even though he does not know that he is angry. If he does know that he is angry, that is another modification of consciousness, and not the same. (Stout 1899: 7-8)

Notice too that to make a distinction between access and phenomenal consciousness is not, in itself, to commit to Block's conception of phenomenal consciousness in terms of qualia, understood as "mental paint" properties. So Block's phenomenal/access distinction in itself does not imply the phenomenal residue conception of phenomenal consciousness, even though he has that conception too.

The second way in which consciousness is understood in terms of intentionality is provided by the intentionalist or representationalist theory of consciousness. Intentionalist theories of perception, in particular, had been proposed by Anscombe (1965) and Armstrong (1968). In the following decade, Daniel Dennett (1978) proposed a "cognitive theory" of consciousness, and developed it in his major work, *Consciousness Explained* (Dennett 1991). Other intentionalist theories of consciousness began to develop over the turn of the century, in the work of Tye (1995), Crane (1998), Byrne (2001) and Chalmers (2006).

Unlike the HOT theory, the intentionalist theory of consciousness does not explain consciousness in terms of the representation of one's own mental states, but rather explains it in terms of the nature of the state itself. For the HOT theory, states are only conscious when they fall under the 'searchlight' of another mental state; for intentionalism, some states are conscious in and of themselves, in virtue of their intentionality. One kind of intentionalism (called "pure" by Chalmers

2006) says that the phenomenal character of a state of mind is identical with or supervenes upon its intentional content (Tye 2005). Another (Chalmers 2006: “impure”) says that the phenomenal character of a mental state is determined by its whole intentional character: i.e. attitude or mode as well as content (Crane 2003; 2009).

Sometimes intentionalism is presented as being motivated by physicalism: the thought is that if we can reduce consciousness to intentionality, and intentionality to functional role, then this will facilitate a physicalist solution to the mind-body problem. But even if this is the actual motivation of some intentionalists, it is not essential to the intentionalist programme (see Chalmers 2006). Intentionalism can be motivated by purely phenomenological considerations (Byrne 2001). For example, intentionalism can be motivated by arguing that it is the best way to understand the mind as involving a ‘perspective’ or a ‘point of view’ (Crane 2009), or the best way to elaborate the idea that all mental facts are representational facts (Dretske 1995).

By contrast, Block (2003) has argued that phenomenological considerations, plus some assumptions about intentionality, can be used to refute intentionalism. If Block’s arguments are going to be dialectically effective, the phenomenal residue conception of consciousness cannot be an *assumption* of the argument, as an obvious phenomenological fact; rather, it must be the argument’s conclusion. For if the phenomenal residue conception were the starting point, then intentionalism would be doomed from the outset, and no further argument would be needed. The fact that Block and others think that argument is needed suggests that they do not really think that the phenomenal residue conception can be assumed.

So far in this section, we have been discussing the attempts to understand consciousness in terms of intentionality. The other large question about the relationship between consciousness and intentionality relates to conscious intentionality *itself*, and how it should be understood. More specifically, the question is about the existence and nature of conscious thinking, or the “phenomenology of thinking”. Regardless of what a theory of consciousness says about the intentionality of perception or sensation, thinking is a paradigm of intentionality, and thinking can arguably be unconscious as well as conscious. So what should a theory of consciousness say about this?

Two broad approaches to this question had arisen by the early years of the 21st century. The first is to say that the phenomenology of thinking should be explained in terms of other, independently understood, phenomenological features (e.g. sensation, imagery etc.). We can call this the “reductionist” approach to the phenomenology of thinking. The second is to say that conscious thinking has its own distinctive (or “proprietary”) phenomenology, which is not reducible to the phenomenology of other mental episodes. This second view is sometimes called the doctrine of “cognitive phenomenology” (Bayne and Montague 2013) though this term is a little misleading: strictly speaking, it ought to be a name for the phenomenon to be explained itself as opposed to a specific explanation of it.

Those who defend proprietary cognitive phenomenology appeal to phenomena like the distinctive experience of coming to understand a sentence one did not previously understand (Strawson 1994) or the role of phenomenology in coming to know what you believe (Pitt 2004). Those who take the reductionist approach argue that all these phenomena can be accommodated by appealing to phenomenology of other mental episodes (see Lormand 1996; Tye and Wright 2013). A distinct idea, but related to the doctrine of cognitive phenomenology, is the doctrine of phenomenal intentionality (Farkas 2008; Kriegel 2013). This holds that some kinds of intentional phenomena have their intentionality in virtue of their phenomenal properties, as opposed to in virtue of their causal relations to the world or teleological properties. This doctrine requires an independent conception of phenomenal properties which can then be used to explain conscious thought or perception (for example). Strictly speaking, phenomenal intentionality does not entail cognitive phenomenology, since it is possible to hold that the former doctrine only applies to perception (say); and nor does cognitive phenomenology entail phenomenal intentionality, because it is possible to say that there is proprietary phenomenology of cognition without thinking that its intentionality is explained by some previously understood phenomenal properties. But many of the leading thinkers in this area hold both versions (e.g. Pitt 2004).

These debates about cognitive phenomenology and phenomenal intentionality, which arose at the end of the 20th century, illustrate the importance of starting discussions of consciousness with an adequate account of the phenomena. And once again, we find that an obstacle to progress

in the debate on cognitive phenomenology is the lingering influence of the “phenomenal residue” conception of consciousness, and the associated distinction between two kinds of mental states (crudely, sensations and propositional attitudes). If we begin with such a conception of consciousness, then it is very hard to make sense of the doctrines of phenomenal intentionality and cognitive phenomenology. But the aim of these doctrines is to explain conscious thought, and what merit can there be in a conception of consciousness which makes the obvious fact of conscious thought impossible to understand?

Conclusion

I have argued that the late 20th century conception of consciousness in analytic philosophy emerged ultimately from the idea of consciousness as givenness, via the behaviourist idea of “raw feels”. In the post-behaviourist period in philosophy, this resulted in the division of states of mind into essentially unconscious propositional attitudes (“beliefs and desires”) plus the phenomenal residue of qualia: intrinsic, ineffable and inefficacious sensory states. It is striking how little in the important questions about consciousness depends on this conception, or on this particular division of mental states. So accepting this division and its associated conceptions of intentionality and consciousness is not an obligatory starting point for the philosophy of mind. A historical investigation of how these ideas came to be seen as inevitable can also help us see how we might reasonably reject them.¹

References

- Anscombe, G.E.M. (1965) "The Intentionality of Sensation: A Grammatical Feature" in R.J. Butler (ed.), *Analytical Philosophy: Second Series* (Oxford: Blackwell) 156-180.
- Armstrong D.M. (1968) *A Materialist Theory of the Mind* (London: Routledge and Kegan Paul)

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- Baldwin Tom (2010) "George Edward Moore" *The Stanford Encyclopedia of Philosophy* Summer 2010 Edition Edward N Zalta ed URL = <<http://plato.stanford.edu/archives/sum2010/entries/moore/>>
- Bayne, Tim and Michelle Montague (eds.) (2013) *Cognitive Phenomenology* (Oxford: Oxford University Press)
- Block, Ned (1980) "Troubles with Functionalism" in Block (ed.) *Readings in the Philosophy of Psychology*, Vol. I (London: Methuen) 268-301.
- Block, Ned (1990) "Inverted Earth" in James Tomberlin (ed.) *Philosophical Perspectives, 4 Action Theory and Philosophy of Mind* (Atascadero: Ridgeview) 53–79. Reprinted in N. Block, O. Flanagan and G. Güzeldere (eds.), *The Nature of Consciousness* (Cambridge, MA: MIT Press 1997) 677-694.
- Block, Ned (1995) "On a Confusion about a Function of Consciousness" *Behavioral and Brain Sciences* 18: 227–247. Reprinted in N. Block, O. Flanagan, and G. Güzeldere (eds.), *The Nature of Consciousness* (Cambridge, MA: MIT Press 1997) 375-416.
- Block, Ned (1996), "Mental Paint and Mental Latex" in E. Villanueva (ed.) *Philosophical Issues* Vol. 7 (Atascadero, CA: Ridgeview) 19–49.
- Block, Ned (2003) "Mental Paint" in M. Hahn and B. Ramberg (eds.) *Reflections and Replies: Essays on the Philosophy of Tyler Burge* (Cambridge, MA: MIT Press) 165-200.
- Block, Ned (2007) "Consciousness, Accessibility and the Mesh between Psychology and Neuroscience" *Behavioral and Brain Sciences* 30: 481-548.
- Block, Ned and Jerry A. Fodor (1972) "What Psychological States are Not" *Philosophical Review* 81: 159-81.
- Brentano, Franz, (1874) *Psychology from an Empirical Standpoint*, L. L McAlister (ed.) A. Rancurello, D.B. Terrell, and L.L. McAlister (trans.)(London: Routledge and Kegan Paul 1973) reprinted with an introduction by Peter Simons (London: Routledge 1995). Originally published as *Psychologie vom empirischen Standpunkt*, (Leipzig: Duncker & Humblot, 1874).
- Boring, E.G. (1946) "Mind and Mechanism" in *The American Journal of Psychology* April 1946
- Broad C.D. (1925) *The Mind and its Place in Nature* (London Routledge and Kegan Paul)

- Byrne, Alex (2001) "Intentionalism Defended" *Philosophical Review* 110: 199–240.
- Carnap, Rudolf, (1955) *Logical Syntax of Language* (Berkeley, University of California Press).
- Carnap, Rudolf (1933) "Psychology in Physical Language", *Erkenntnis* 3: 107-142 (1932/3).
- Carruthers Peter (2003) *Phenomenal Consciousness a naturalistic theory* CUP 2000
- Carruthers Peter (2011) "Higher-Order Theories of Consciousness" *The Stanford Encyclopedia of Philosophy* Fall 2011 Edition Edward N Zalta ed URL = <<http://plato.stanford.edu/archives/fall2011/entries/consciousness-higher/>>
- Chalmers, David (1995) "Facing Up to the Problem of Consciousness" *Journal of Consciousness Studies* 2: 200-19.
- Chalmers, David (1996) *The Conscious Mind* (Oxford: Oxford University Press).
- Chalmers, David (2004) "The Representational Character of Experience" in B. Leiter (ed.) *The Future for Philosophy* (Oxford: Oxford University Press) 153–181.
- Chalmers, David (2006), "Perception and the Fall from Eden" in Tamar Szabó Gendler and John Hawthorne (eds.), *Perceptual Experience* (Oxford: Oxford University Press).
- Crane, Tim (1998) "Intentionality as the Mark of the Mental" in A. O’Hear (ed.) *Contemporary Issues in the Philosophy of Mind* (Cambridge: Cambridge University Press) 229–251.
- Crane, Tim (2000) "The Origins of Qualia" in Tim Crane and Sarah Patterson (eds.) *History of the Mind-Body Problem* (London: Routledge) 169-194.
- Crane, Tim (2001) *Elements of Mind* (Oxford: Oxford University Press).
- Crane, Tim (2003) "The Intentional Structure of Consciousness" in A. Jokic and Q. Smith (eds.), *Consciousness: New Philosophical Perspectives* (Oxford: Oxford University Press) 33–56.
- Crane, Tim (2009) "Intentionalism" in Ansgar Beckermann, Brian McLaughlin, and Sven Walter (eds.) *Oxford Handbook to the Philosophy of Mind* (Oxford: Oxford University Press) 474–493.
- Crane, Tim and Sarah Patterson (eds.) (2000) *History of the Mind-Body Problem* (London: Routledge).
- Dennett, Daniel C. (1978) "Toward a Cognitive Theory of Consciousness" *Minnesota Studies in the Philosophy of Science* 9 (1978).

- Dennett, Daniel C. (1991) *Consciousness Explained* (London: Allen Lane).
- Dretske, Fred I. (1995) *Naturalizing the Mind* (Cambridge, MA: MIT Press).
- Farkas Katalin 2008 "Phenomenal Intentionality without Compromise" *The Monist* 91: 273-93
- Farrell, B.A. (1950) "Experiences" *Mind* 59:170-98
- Feigl, Herbert (1958) "The "Mental" and the "Physical"" in H. Feigl, M. Scriven, and G. Maxwell (eds.) *Minnesota Studies in the Philosophy of Science* (Minneapolis: University of Minnesota Press) 370-497.
- Fodor Jerry A (1991) "Too hard for our kind of mind " *London Review of Books* 13 June 27
- Gregory Frederick (1977) *Scientific Materialism in Nineteenth Century Germany* Studies in the History of Modern Science vol i (Dordrecht: D Reidel).
- Güzeldere, Güven (1997) "The Many Faces of Consciousness: A Field Guide" in N. Block, O. Flanagan, and G. Güzeldere (eds.), *The Nature of Consciousness* (Cambridge, MA: MIT Press) 1-68.
- Harman, Gilbert. (1990), "The Intrinsic Quality of Experience" in J. Tomberlin (ed.) *Philosophical Perspectives* 4 (Atascadero: Ridgeview); reprinted in N. Block, O. Flanagan, and G. Güzeldere (eds.) *The Nature of Consciousness* (Cambridge, MA: MIT Press 1997) 663-676.
- Horgan, Terence and Tienson, John (2002) "The Intentionality of Phenomenology and the Phenomenology of Intentionality" in David Chalmers (ed.) *Philosophy of Mind: Classical and Contemporary Readings* (Oxford: Oxford University Press) 520–533.
- Hossack, Keith (2002) "Self-knowledge and Consciousness" *Proceedings of the Aristotelian Society* 102: 163–181.
- Husserl Edmund (1913) *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie Erstes Buch* (Tübingen Max Niemeyer 1980). English edition *Ideas Pertaining to a Pure Phenomenology and a Phenomenological Philosophy First Book* trans. F Kersten (Dordrecht: Kluwer 1982).
- Husserl Edmund (1952) *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie Zweites Buch* ed. M. Biemel (The Hague: Martinus Nijhoff 1952). English edition

Ideas Pertaining to a Pure Phenomenology and a Phenomenological Philosophy Second Book trans. R Rojcewicz and A Schuwer (Dordrecht: Kluwer 1989).

Husserl Edmund (1900-1) *Logische Untersuchungen* (Tübingen: Max Niemeyer 1980). English edition *Logical Investigations* trans. J N Findlay 2 vols (London Routledge 2001).

Husserl, Edmund (1948) *Erfahrung und Urteil* ed L Landgrebe (Hamburg: Felix Meiner 1985). English edition *Experience and Judgement* trans. J S Churchill and K Ameriks (Evanston: Northwestern University Press 1973).

Jackson, Frank (1982) "Epiphenomenal Qualia" *Philosophical Quarterly* 32: 127–136.

James, William (1890) *Principles of Psychology* (New York: Holt).

James William (1904) "Does Consciousness Exist?" *Journal of Philosophy, Psychology and Scientific Method* 1: 477-91

Jaynes Julian (1976) *Origins of Consciousness in the Breakdown of the Bicameral Mind* (Boston: Houghton Mifflin 1976)

Kirk, Robert (1974) "Zombies v. Materialists", *Proceedings of the Aristotelian Society Supplementary Volume* 48: 135–152.

Kirk Robert (1994) *Raw Feeling: A Philosophical Account of the Essence of Consciousness* (Oxford: Oxford University Press).

Kriegel, Uriah (2007) "Intentional Inexistence and Phenomenal Intentionality" *Philosophical Perspectives* 21: 307–340.

Kriegel, Uriah (ed.) (2013) *Phenomenal Intentionality* (Oxford: Oxford University Press).

Levin Janet 1986 "Could Love be Like a Heatwave " *Philosophical Studies* 49: 245-61.

Levine, Joseph (1983) "Materialism and Qualia: The Explanatory Gap" *Pacific Philosophical Quarterly* 64: 354–361.

Lewis, C.I. (1929) *Mind and the World Order* (London: Constable).

Lewis, David (1966) "An Argument for the Identity Theory" *Journal of Philosophy* 63: 17-25.

Lormand, Eric (1996) "Nonphenomenal Consciousness" *Noûs* 30:242-61.

Lycan, W.G. (2001) "A Simple Argument for a Higher-Order Representation Theory of Consciousness" *Analysis* 61: 3–4.

- Manson, Neil (2000) "A tumbling-ground for whimsies'? The history and contemporary role of the conscious/unconscious contrast' in Tim Crane & Sarah A. Patterson (eds.), *History of the Mind-Body Problem*. London: Routledge.
- Martin, M.G.F. (2000) "Beyond Dispute: Sense-Data, Intentionality and the Mind-Body Problem" in Tim Crane and Sarah Patterson (eds.) *History of the Mind-Body Problem* (London: Routledge) 195-231.
- Martin M.G.F. (2003) "Sensible Appearances" in Thomas Baldwin (ed.) *The Cambridge History of Philosophy 1870-1945* (Cambridge: Cambridge University Press).
- Maslin, Keith (2001) *An Introduction to the Philosophy of Mind* (Cambridge: Polity Press).
- McGinn, Colin (1991) "Can we Solve the Mind-Body Problem?" in *The Problem of Consciousness and Other Essays* (Oxford: Blackwell) 23-43.
- Mellor, D.H. (1977–1978) "Conscious Belief" *Proceedings of the Aristotelian Society* 78: 87–101.
- Mole Christopher, Smithies, Declan and Wayne Wu (eds.) (2011) *Attention: Philosophical and Psychological Essays* (Oxford: Oxford University Press).
- Moore, G.E. (1953) "Propositions" *Some Main Problems of Philosophy* (London: George Allen and Unwin) 57-9.
- Moore, G.E. (1903) "The Refutation of Idealism" *Mind* 12: 433–53.
- Nagel, Thomas (1974), "What Is It Like to Be a Bat?" *Philosophical Review* 83: 435–450.
- Neumann, Erich (1949) *The Origins and History of Consciousness* (Princeton 1953).
- O'Shaughnessy, Brian (2000) *Consciousness and the World* (Oxford: Oxford University Press).
- Papineau, David (2002) *Thinking About Consciousness* (Oxford: Oxford University Press).
- Peacocke, Christopher (1993) *A Study of Concepts* (Cambridge, MA: MIT Press)
- Pitt, David (2004) "The Phenomenology of Cognition or What Is It Like to Think That P?" *Philosophy and Phenomenological Research* 69: 1–36.
- Place U.T. (1990) "E G Boring and the Mind-Brain Identity Theory" *British Psychological Society History and Philosophy of Science Newsletter* 11: 20–31.

- Poellner Peter (2007) "Consciousness in the World Husserlian Phenomenology and Externalism" in Brian Leiter and Michael Rosen (ed.) *Oxford Handbook to Continental Philosophy* (Oxford: Oxford University).
- Price, H.H. (1932) *Perception* (London: Methuen).
- Prinz, Jesse (2013) *The Conscious Brain* (New York: Oxford University Press).
- Quine, W.v.O (1981) *Theories and Things* (Cambridge, MA: Harvard University Press).
- Rey, Georges (1997) *Contemporary Philosophy of Mind* (Oxford: Blackwell).
- Robinson, Howard (1982) *Matter and Sense* (Cambridge: Cambridge University Press).
- Rosenthal, David (1986) "Two Concepts of Consciousness" *Philosophical Studies* 49: 329–359.
- Rosenthal, David (1994) "Identity Theories" in Samuel Guttenplan (ed.) *A Companion to the Philosophy of Mind* (Oxford: Blackwell) 348-354.
- Rosenthal, David (2005) *Consciousness and Mind* (Oxford: Oxford University Press).
- Russell, Bertrand (1927) *The Analysis of Matter* (London: George Allen and Unwin).
- Ryle, Gilbert (1949) *The Concept of Mind* (London: Hutchinson).
- Ryle, Gilbert (1979) *On Thinking* (Oxford: Blackwell).
- Sartre, Jean-Paul (1958) *Being and Nothingness* (London: Methuen; originally published 1943).
- Searle, John (1992) *The Rediscovery of the Mind* (Cambridge, MA: MIT Press).
- Sellars, Wilfrid (1957) *Empiricism and the Philosophy of Mind* (Cambridge, MA: Harvard University Press 1997).
- Shoemaker, Sydney (1975) "Functionalism and Qualia" *Philosophical Studies* 27: 291–315.
- Shoemaker, Sydney (1980) "Functionalism and Qualia" in *Identity, Cause, and Mind* (Cambridge: Cambridge University Press) 184-205.
- Shoemaker, Sydney (2007) "A Case for Qualia" in Brian P McLaughlin & Jonathan D Cohen (eds.) *Contemporary Debates in Philosophy of Mind* (Oxford: Blackwell).
- Siewert, Charles (1998) *The Significance of Consciousness* (Princeton: Princeton University Press).
- Smith Quentin and Aleksandar Jokic (2003) (eds.) *Consciousness New Philosophical Perspectives* (Oxford: Oxford University Press).

- Sprigge T.L.S. (1971) "Final Causes" *Proceedings of the Aristotelian Society Supplementary Volume* 45:149-192.
- Stout G.F. (1899) *A Manual of Psychology* (London: University Correspondence College Press).
- Strawson, Galen (1994) *Mental Reality* (Cambridge, MA: MIT Press).
- Strawson, Galen (2006) "Realistic monism - why physicalism entails panpsychism" *Journal of Consciousness Studies* 13:3-31.
- Tanney Julia (2014) "Gilbert Ryle" *The Stanford Encyclopedia of Philosophy* Winter 2014 Edition Edward N Zalta (ed.) URL = <[http //plato stanford edu/archives/win2014/entries/ryle/](http://plato.stanford.edu/archives/win2014/entries/ryle/)>
- Tennant Neil (2006) "Cognitive Phenomenology Semantic Qualia and Luminous Knowledge" in P. Greenough and D. Pritchard *Williamson on Knowledge* (Oxford: Oxford University Press).
- Thomas, Emily (2013) "Space, Time and Samuel Alexander" *British Journal for the History of Philosophy* 21 549-569.
- Tolman E.C. (1932) *Purposive Behaviour in Animals and Men* (New York: Century).
- Tolman, E.C. (1938) "The Determiners of Behavior at a Choice Point" *Psychological Review* 45: 1-14.
- Tye, Michael (1995) *Ten Problems of Consciousness* (Cambridge, MA: MIT Press).
- Tye, Michael and Briggs Wright (2013) "Is there a Phenomenology of Thought?" in Bayne and Montague (eds.) *Cognitive Phenomenology* Oxford: Oxford University Press.
- Tye, Michael (2013) "Qualia" *The Stanford Encyclopedia of Philosophy* Fall 2013 Edition Edward N Zalta ed URL = <[http //plato stanford edu/archives/fall2013/entries/qualia/](http://plato.stanford.edu/archives/fall2013/entries/qualia/)>
- Whyte, L.L. (1960) *The Unconscious Before Freud* (New York: Basic Books).
- Wittgenstein, Ludwig (1953) *Philosophical Investigations*, G.E.M. Anscombe and Rush Rhees (eds.) and G.E.M. Anscombe (trans.) (Oxford: Blackwell).
- Wu, Wayne (2014) *Attention* (London: Routledge).