



‘Experience’, ordinary and philosophical: a corpus study

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Abstract

Common arguments for realism about phenomenal consciousness contend that this is a folk concept, with proponents expecting it to be lexicalised in ordinary language. In English, the word ‘experience’ is typically regarded as the best candidate. This predicts that ‘experience’ will be used to refer to mental states and episodes, not only in philosophical but also in ordinary discourse. We conduct a corpus study in order to assess this claim and to understand the actual use of the word in non-academic, academic, and philosophical discourse. In non-academic discourse, uses that refer to knowledge or sources of knowledge, and to public events, are found to dominate. Uses that refer to mental states or episodes dominate only in the philosophy of mind (and not even in philosophy at large).

Keywords Experience · Phenomenal consciousness · Folk concept of consciousness · Ordinary language philosophy · Corpus analysis

1 Introduction

Use of the term ‘experience’ is ubiquitous in philosophy of mind. Often it is said to be a synonym for various phrases denoting phenomenal consciousness or phenomenally conscious mental states. For instance, here is how Chalmers (2018, p. 6) introduces the terminology in a recent article:

I use ‘experience’, ‘conscious experience’, and ‘subjective experience’ more or less interchangeably as synonyms for phenomenal consciousness (when used as mass nouns) or for phenomenal states (when used as count nouns). Phenomenal states are ‘what-it-is-like’ states: states individuated by what it is like to be

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in them (e.g. what it is like to see a certain shade of red or to feel a specific sort of pain). Phenomenal properties are ‘what-it-is-like’ properties: properties individuated by what it is like to have them.

Further examples abound, even as many other philosophers use ‘experience’ in this way without flagging it.¹ This use in philosophy of mind is not typically intended to introduce a technical sense of the term, but rather seems to be assumed to reflect the ordinary meaning of ‘experience’. And occasionally this is made explicit, as in Schwitzgebel (2016, p. 227):

The word ‘experience’ is sometimes used non-phenomenally (e.g. ‘I have twenty years of teaching experience’). However, in normal English it often refers to phenomenal consciousness.

In like fashion, other philosophers of mind assert that ‘experience’ is the less technical or more natural or more straightforward way to speak of phenomenal consciousness.²

Other work in philosophy has challenged this assertion, raising doubts about whether ‘experience’ can be correctly used in a way that lines up with the notions of phenomenal consciousness and phenomenal qualities. For instance, Hacker (2002) calls on his sense of English usage to argue against this claim. Some work in linguistics goes further, calling on dictionary definitions and examples drawn from linguistic corpora to draw out a range of meanings for ‘experience’ and raising doubts about the clarity of the use in philosophy of mind and the alignment of these philosophical and ordinary uses (Wierzbicka, 2010, 2019). And some experimental philosophers have raised corresponding doubts about the claim that ‘experience’ is used in ordinary English to express such a concept (Sytsma & Machery, 2010; Sytsma, 2010a).

This apparently small and at any rate pleasingly tractable question about the ordinary use of the word ‘experience’ may shed light on some larger issues. The existence of phenomenal consciousness, and what this means for the nature of ourselves and our

¹ To illustrate, Block (1995, p. 227) opens his influential discussion of concepts of consciousness by noting that ‘there are a number of very different “consciousnesses”’ and then clarifying the concept he is concerned with by equating it with experience: ‘Phenomenal consciousness is experience; the phenomenally conscious aspect of a state is what it is like to be in that state.’ More recently, both the *Stanford Encyclopedia of Philosophy* entries on perceptual experience and the contents of perception note this type of understanding of ‘experience’. Thus, Silins (2019, pp. 20–21) writes that ‘an uncontroversial theory of perceptual experiences holds that they all have a conscious character—for any experience *e* there is something it is like to have *e*. Further, part of what it is for something to be an experience is for it to have a conscious character. There is much debate about how to explain the nature of perceptual consciousness, but there is little debate about whether something is an experience only if it has conscious character.’ Similarly, Siegal (2021, p. 2) writes that ‘it is definitional of experience, as the term is used here, that they have some phenomenal character, or more briefly, some phenomenology. The phenomenology of experience is what it is like for the subject to have it.’

² For instance, Block (2004, p. 785) notes that “‘quale’—which is more clearly a technical term than “subjective experience”—is more often used by those who are inclined to reject the common-sense conception of subjective experience”; Chalmers (1995, p. 201) writes that ‘sometimes terms such as “phenomenal consciousness” and “qualia” are also used here, but I find it more natural to speak of “conscious experience” or simply “experience”’; and Chalmers (1996, p. 6) elaborates: ‘A number of alternative terms and phrases pick out approximately the same class of phenomena as “consciousness” in its central sense. These include “experience”, “qualia”, “phenomenology”, “phenomenal”, “subjective experience”, and “what it is like”.... I will use all these phrases in talking about the central phenomenon of this book, but “consciousness” and “experience” are the most straightforward terms, and it is these terms that will recur’.

world, has been a central topic of debate in contemporary philosophy of mind. Often phenomenal consciousness is treated as *the* major unsolved mystery facing us—as the ‘largest outstanding obstacle in our quest for a scientific understanding of the universe’ (Chalmers, 1996, p. 11). However, precisely in view of the severity of the philosophical problems engendered, it is important to ask why we should believe that phenomenal consciousness exists in the first place. The standard answer is to simply treat it as obvious, taking the occurrence of phenomenal consciousness and qualia to be self-evident.³ Thus, it is asserted that the existence of phenomenal consciousness is ‘phenomenologically obvious’ (Stoljar, 2006, p. 5), that ‘the existence of qualia seems indisputable’ (Kind, 2020, Sect. 0) since ‘our every experience reveals their existence’ (Kind, 2008, p. 285), that ‘there is nothing that we know more intimately’ (Chalmers, 1995, p. 200) than phenomenal consciousness, and so on.⁴ In line with this, both skeptics and realists about the existence of phenomenal consciousness have treated phenomenal consciousness as part of our ordinary understanding of the world, taking the concept or conception to be part of our ‘folk theory of consciousness’ (Dennett, 2005, p. 27) or our ‘common-sense conception of subjective experience’ (Block, 2004, p. 785). This itself raises a puzzling question, since on the face of it we would expect there to be ordinary terms that lexicalize a concept that refers to such a ‘central and manifest aspect of our mental lives’ (Chalmers, 1995, p. 207), yet philosophers use technical language like ‘phenomenal consciousness’ and ‘qualia’ to discuss it. As seen above, some suggest that ‘experience’ fills this gap, being an ordinary-language analogue of the technical vocabulary (Block, 2004, p. 785; Chalmers, 1995, p. 201; Schwitzgebel, 2016, p. 227). And yet we are not aware of any work that provides evidence that this is a common use of experience talk.

The topic therefore offers a promising site for new contributions to constructive ordinary language philosophy, in the wake of Austin (1957/1975). This approach seeks to extract from an examination of the actual use of words, in non-philosophical discourse, conclusions about folk conceptions of the (social or physical) world and aims to advance from these to conclusions about the world itself (Hansen, 2020, p. 2434). Austin himself stressed that this approach lends itself more to application to some topics than others (Austin, 1957/1979, pp. 185–186). Experience seems particularly promising. Realists about phenomenal consciousness typically take the phenomenon to be a central, manifest feature of our mental lives. As such, these proponents predict that laypeople have a folk conception of this supposedly obvious feature of their minds. And, further, they expect this folk conception to be lexicalized, with ‘experience’ being the candidate of choice for this job in ordinary English.⁵ This realist argument generates testable predictions about that use of experience-talk. An alternative to this

³ As Jaworski (2011, p. 215) notes, “those who believe in qualia share a sense that the existence of qualia is too obvious to require argument.”

⁴ Examples abound. To give just two more, pursuing the common strategy of definition by example, Schwitzgebel (2016, p. 229) asserts that ‘phenomenal consciousness is the most folk-psychologically obvious thing or feature that the positive examples possess and that the negative examples lack’. And Chalmers (2003, p. 112) contends that the intuition behind phenomenal realism ‘is so strong that to deny it’ the skeptic would need ‘exceptionally powerful arguments’, offering in support the assertion that the ‘intuition appears to be shared by the large majority of philosophers, scientists, and others’.

⁵ Proponents generally focus on English, making the implicit assumption that there will be corresponding terms in other languages. Although our focus here is on assessing the claim that the English word ‘experience’

realist line of thinking contends that the concept of phenomenal consciousness is not a widespread folk concept but is instead an artefact of philosophical theorizing that realists then read into ordinary language, perhaps as a matter of common confirmation bias (Nickerson, 1998). If this is correct, then we would not expect the use of ‘experience’ in ordinary English to correspond with the philosophical use.⁶

By examining the use of the word ‘experience’ in non-philosophical discourse, we can therefore make a start on assessing one type of warrant that realists have offered for believing in the existence of phenomenal consciousness. This negative critique fits a mold that is common to much experimental philosophy (Sytsma & Livengood, 2016). Flipping things around, if we accept the background assumptions often made by realists about phenomenal consciousness that central and manifest features of our mental lives will attract a folk conceptualization that will be lexicalized in non-philosophical discourse, then the examination of the prime candidate’s ordinary use will provide evidence relevant to assessing the truth of the philosophically controversial assumption that phenomenal consciousness exists. This provides a positive argument that fits a bit better with models from constructive ordinary language philosophy.⁷

In the present paper we will examine the key assertion that the terms ‘experience’ and ‘experiences’ are commonly used in ordinary English as synonyms for technical, philosophical phrases like ‘phenomenal consciousness’ or ‘phenomenally conscious mental states’. We will do so by conducting a comparative corpus analysis of experience talk in philosophical, academic, and non-academic discourse. Section 2 will outline the extant debate. Section 3 looks at a range of dictionary-attested meanings. Based on this we develop a coding scheme that is then applied to samples of ordinary, general academic, and philosophical usage of both ‘experience’ and ‘experiences’, as reported in Sect. 4. The results suggest that while the use of these terms to reference mental states is somewhat common among philosophers, and is the most common use in philosophy of mind, it is rare outside of philosophy, and virtually nonexistent in ordinary discourse.

2 Common-sense and phenomenal consciousness

Work coming at the question of ‘experience’ from a variety of different angles suggests that the term is not ordinarily used in the way that philosophers of mind have suggested. For instance, Hacker (2002) argues that the philosophical use of ‘experience’ reflects deep conceptual confusions (see also Bennett & Hacker, 2003). To show this he introduces the philosophical use discussed above, noting that ‘*every* experience, it is claimed, has distinctive qualitative character’ or qualia (p. 158). Hacker’s primary

Footnote 5 continued

is ordinarily used to refer to phenomenal consciousness, we believe that cross-linguistic work is called for to examine the implicit assumption about other languages, although this is beyond the scope of the present paper. We want to thank two anonymous reviewers for emphasizing this point.

⁶ Note that divergence of philosophical usage from ordinary usage is not itself a problem. Rather, the point is that such a divergence would undermine the line of argument given for realism about the existence of phenomenal consciousness.

⁷ The negative argument should be acceptable even to those who are skeptical of attempts to read ontology off of language use (see, e.g., Hale, 1986) and hesitate to go along with the positive argument.

focus is not on the term ‘experience’ itself, but on the phrases used to draw out this use, such as that they have ‘qualitative character’ or that there is ‘something it is like’ to have them. In line with this, he allows that ‘experience’ can coherently be used to describe the varied range of episodes often given as examples in discussions of phenomenal consciousness, from feeling pains to seeing colors. Hacker raises doubts, however, that all of these episodes can meaningfully be said to have a qualitative character or something it is like to undergo them (where this is understood in terms of evoking an attitudinal response such as finding it pleasant or unpleasant), and corresponding doubts about the coherence of treating such responses *to* an experience as qualities *of* the experience.

In laying out this critique, Hacker calls on a couple of dictionary-attested senses of ‘experience’ that we will discuss below, with ‘experience’ referring to both public events involving the agent, often with a focus on how those events affect the agent, and to more personal or psychological events such as undergoing an emotion or physical feeling. For instance, he notes that ‘with respect to any experience we can ask what it was’, going on to state that ‘the answer will specify the individuating character of the experience, e.g., whether it was feeling a twinge or a tickle, seeing a red rose or hearing the sound of music, feeling angry with A or jealous of B, playing cricket or going to the opera’ (p. 174). Hacker then goes on to assert that none of these examples raise the sorts of problems that philosophers suppose—that ‘none of this is mysterious, surprising or baffling’ (p. 174). What this seems to point out is that the concept that generates the supposed mystery, here, involves more than simply detailing such episodes; it requires interpreting the episodes in a particular way, namely, construing the experiences themselves as mental states and associating the distinguishing features we are aware of in the episodes with those mental states—the feeling, the redness, and so on, being construed as something the experiences *have*.

Wierzbicka (2010) provides a more detailed analysis of the use of ‘experience’ in non-philosophical discourse, calling on linguistic evidence to lay out two broad groups of senses. Based on dictionary definitions and both historical and contemporary examples drawn from linguistic corpora, she distinguishes an older set of senses that centers on accumulated knowledge and a more modern set of senses that roughly corresponds with the sense Hacker proposes, although Wierzbicka seems to focus more on the participants’ reaction to or awareness of the event than the event itself. Thus, in characterizing the latter set of senses, Wierzbicka suggests that ‘experience’ is used to refer to countable episodes ‘linked with an event some aspects of which are known only to the person to whom this event happens’ (p. 39). Here, she seems to be saying that while the experiences are *of* an event, they aren’t the events themselves; rather, on this usage, the term ‘refers to people’s subjective awareness of something that is happening to them’ (p. 39).

This focus on the awareness of the event, however, is not clearly supported by the literary examples given to draw out the usage, such as (Wierzbicka, 2010, p. 39):

I had quite forgotten that mornings in the country were so fine! One might enjoy an **experience** of this kind once or twice a year very well indeed. (J.T. Trowbridge, 1873)

Here the experiences at issue would seem to be the events—spending mornings in the country—and not the narrator’s awareness of the events, although there is a clear concern with the narrator’s attitudinal response to the events, in Hacker’s terminology. Indeed, the sense of an ‘experience’ as an event that affects the person—that they have an attitudinal response to—fits well with other evidence Wierzbicka presents, such as adjectives that are commonly used to describe an ‘experience’, as given by *A Dictionary of Selected Collocations* (Hill & Lewis, 1977). Examples include ‘alarming’, ‘delightful’, ‘horrible’, ‘moving’, etc., which Wierzbicka takes to ‘describe the experience in question in terms of accompanying emotions’ (p. 40). Similarly, contemporary examples drawn from the *Collins Birmingham University International Language Database* (COBUILD) paint a corresponding picture, e.g.:

We had a water birth.... It was **a great experience** and no problem.

When the group emerged from the long corridor out of the pyramid, their faces were flushed with pleasure. It was **a marvelous experience**, spiritual, as well as cultural.

I in fact enjoyed going to Oxford.... I mean, it was **a wonderful experience** even if I didn’t do very well on the exams.

In each case, the experience at issue is an extended public event—a water birth, a trip through a pyramid, attending Oxford University—with the adjective indicating the participants’ positive attitudinal response to it. Further, some of these would seem to be shared experiences, with no clear emphasis on private knowledge.

Such examples also serve to highlight a further aspect of the countable sense of ‘experience’ that is worth noting: the events at issue are generally unusual, being ‘seen as sufficiently different from the normal state to attract the person’s attention and also to be linked with some noticeable feeling’ (p. 41). This stands in contrast to many of the range of examples typically found in philosophical discussions, including those given by Hacker. Seeing a red rose, for instance, would not seem to be terribly novel on its own, nor necessarily tied to a notable attitudinal response.

There is a danger in focusing on subjective awareness of an event in interpreting such examples, rather than the event itself and the participants’ reaction to it (beyond their being aware of it!): it risks running these together with seemingly distinct uses in contemporary philosophy of mind. Wierzbicka considers a number of such examples, such as the following:

So if I hold up my hand in front of my face, what I directly perceive, what I strictly and literally perceive, according to Descartes, is a certain visual **experience** that I am having. Descartes calls these **experiences** ‘ideas’. (Searle, 2004, p. 22)

The primary complaint Wierzbicka raises about this example is that Searle calls on a contemporary sense of ‘experience’ to elucidate historical writing, coupled with failing to articulate what exactly is meant by this polysemous term. But it is also important to note how this use diverges from the examples given above: here the experience is mental—it is something going on in the mind—and there is no focus on its novelty or the attitudinal response to it. Each of these elements stands in sharp contrast to, for instance, describing a water birth as being a great experience. And, indeed, Wierzbicka (2019) recognizes that the ordinary use of ‘experience’ diverges from

the philosophical sense illustrated by Searle, arguing that phenomenal consciousness ‘remains a philosopher’s construct’ (p. 264). A key piece of evidence, here, is that the ordinary use of ‘experience’ does not cover the range of types of episodes given for the philosophical concept; indeed, Wierzbicka argues that ‘there is no word in English (or other known human languages) covering both what one sees and what one feels’ (p. 264).

A final piece of evidence suggesting that the ordinary use of ‘experience’ does not conform to philosophical expectations comes from recent work in experimental philosophy of mind that has examined whether lay people (people with little to no training in philosophy or consciousness studies) employ a concept suitably similar to the philosophical concept of phenomenal consciousness. Recognizing that phrases like ‘phenomenal consciousness’ are not part of ordinary parlance, this has largely involved eliciting judgments about a range of mental state attributions to different entities, such as a corporation (Knobe & Prinz, 2008) or a simple robot (Sytsma & Machery, 2010).

In their main study, Sytsma and Machery (2010) gave participants either a description of a normal human or a simple non-humanoid robot performing behaviorally analogous tasks expected to elicit attributions of one of two prototypical examples of phenomenally conscious mental states—seeing red or feeling pain—for the human. Participants were then asked whether the entity (human or robot) had the mental state at issue (saw red, felt pain). Sytsma and Machery found that while philosophers tended to treat both states similarly, denying that the robot either saw red or felt pain, lay people tended to treat them quite differently, denying that the robot felt pain while affirming that it saw red. But if lay people were employing the concept of phenomenal consciousness in responding to these questions, then they should have treated the two states similarly, just as the philosophers did. They did not. Sytsma and Machery took this to suggest that the lay participants were *not* generally employing something suitably similar to the philosophical concept of phenomenal consciousness.

The most prominent criticism of this work has been the *ambiguity objection* (Sytsma, 2014). This objection contends that the phrase ‘see red’ is ambiguous between an informational reading, on which the entity simply distinguishes between things based on color information, and a phenomenal reading, on which the entity has appropriate phenomenally conscious mental states (see Huebner, 2010; Peressini, 2014; Fiala et al., 2013; and Chalmers, 2018). The critic then argues that while lay people tend to understand ‘see red’ in Sytsma & Machery’s study in the informational sense, philosophers tend to understand it in the phenomenal sense. However, subsequent studies revealed that offering alternative ‘informational’ response items to the questionnaire, such as that the robot *detected* red, does not alter the general response for seeing red (Sytsma, 2013), and provided evidence that the ambiguity supposed by the objection does not get off the ground because people tend to employ a naïve conception of both colors and pains (e.g., Reuter & Sytsma, 2020; Sytsma, 2009, 2010b, 2012). This latter response contends that people treat the distinguishing properties at issue for episodes like seeing red and feeling pain, not as being had by the mental state, but the objects seen or body parts felt, undermining the informational/phenomenal distinction that the ambiguity objection rests on.

An important further way of addressing the ambiguity objection can serve to introduce the main concern of the present paper. As detailed by Sytsma and Ozdemir (2019),

critics have suggested that if, in Sytsma and Machery's (2010) study, 'see' and 'feel' were replaced with 'experience'—the term expected to best trigger the commonsense concept of phenomenal consciousness—then the asymmetry in responses should dissipate. To test this, Sytsma and Ozdemir, replicated Sytsma and Machery's study, but replaced 'see red' with 'experience red' and 'feel pain' with 'experience pain' in the questions. They found the same basic pattern of results for lay people, with participants tending to affirm that the robot experienced red and tending to deny that the robot experienced pain. Not only do these results indicate against the ambiguity objection, but they provide initial evidence that lay people do not tend to interpret 'experience' in terms of phenomenal consciousness as has been assumed. Further, similar results are found in both Ozdemir (2022) and Sytsma & Snater (2023), where participants treated 'see' questions and 'experience' questions similarly, holding that a variety of physical and robotic duplicates of a person would be capable of both seeing colors and experiencing sights and sounds.

In line with the expectation that 'experience' is ordinarily used to indicate phenomenal consciousness, Chalmers (2020, p. 239) notes surprise with regard to Sytsma & Ozdemir's finding, concluding that the 'results suggest that "experience red" and "see red" are less different than I thought'. Despite this, however, he continues to hold that 'experience' has an ordinary phenomenal reading, suggesting that this merely shows that such terms are not univocal:

My view is that the relation between words and concepts is far from one-to-one: most words in this vicinity have multiple meanings, and few words have a univocal reading. So even if no word univocally expresses phenomenal consciousness, this does not mean there is no concept of phenomenal consciousness. (p. 239)

Indeed, in the context of Chalmers's general expectation that belief in phenomenal consciousness is widespread, it seems that he holds that the phenomenal usage is common, even if not elicited in studies like those conducted by Sytsma and Ozdemir. Of course, studies like these cannot *rule out* that people employ the concept of phenomenal consciousness. Rather, what they indicate is that participants do not tend to employ such a concept in contexts in which standard philosophical wisdom would expect them to do so. And one rather plausible explanation of this finding is that people simply do not employ such a concept.

Chalmers's response raises an important question about the use of 'experience', however. It is clearly the case that the term is used in ways that are not obviously suggestive of phenomenal consciousness, such as in referring to accumulated knowledge, as noted above by Wierzbicka (2010). And it is also clearly the case that the term has been used as a synonym for phenomenally conscious mental states, namely, by philosophers of mind. But this raises the question of whether this philosophically relevant use of 'experience' is at all common in ordinary English.

As we noted at the outset, this question is of philosophical, rather than merely philological interest: Proponents hold that phenomenal consciousness is a manifest and important feature of our mental lives, such that they expect there to be a folk conception of it that is lexicalized in most languages, and taking English to be perfectly typical in this regard. In English, 'experience' has frequently been regarded as the best candidate by philosophers who are competent speakers of the language. If the

word turns out not to be ordinarily used to refer to phenomenally conscious states or episodes, or even not to refer to any mental states or episodes at all, this would then pose a challenge to this standard line of reasoning, raising doubts about the claim that there is a folk conception of phenomenal consciousness. This in turn would raise doubts about the claim that phenomenal consciousness is a manifest feature of our mental lives, thereby undermining a central reason given for believing in the existence of this supposed phenomenon.

To address this philosophically interesting question, we need to more carefully look at how ‘experience’ is actually used. To do so, we now consider dictionary explanations and conduct a corpus study.

3 Dictionary explanations

To gain a first overview of established uses of ‘experience’ as noun and verb, we consulted a lexical database (*Princeton WordNet 3.1*) and online versions of five dictionaries compiled with different methodologies: *Collins English Dictionary*, *Macmillan English Dictionary for Advanced Learners (MEDAL)*, *Merriam Webster*, *Oxford Dictionaries (Lexico)*, and the *Oxford English Dictionary (OED)*.⁸ They distinguish 3–5 (non-obsolete) senses of the noun and 2–5 senses of the verb. These sources recognize both uses of the noun as an uncountable mass noun and as a count noun. Different dictionaries carve up the linguistic pie in slightly different ways, and some cover ostensibly rare uses neglected by others. Even so, a clear pattern emerged from perusal.

As a *mass noun*, ‘experience’ is used to refer to an *epistemic product and its source*: the knowledge or skill gained and the observation or engagement with something through which one gained it. This expands on the first set of senses noted by Wierzbicka (2010). *Lexico* recognizes the two mass noun senses (1) ‘practical contact with and observation of facts and events’ (example: *Here is one painful lesson learned from experience*) and (1.1) ‘the knowledge or skill acquired by a period of practical experience of something, especially that gained in a particular profession’ (*You should have the necessary experience in health management*). The *OED* clarifies that ‘the actual observation of facts or events [are] considered as a source of knowledge’ (*OED3*) and brings out the breadth of the resulting knowledge: ‘knowledge resulting from actual observation or from what one has undergone’ (*OED7*). *Merriam Webster* lists these along with some closely related senses: (1a) ‘direct observation of or participation in events as a basis of knowledge’, (1b) ‘the fact or state of having been affected by or gained knowledge through direct observation or participation’, (2a) ‘practical knowledge, skill, or practice derived from direct observation of or participation in events or in a practical activity’, and (2b) ‘the length of such participation’ (which, we suggest, is often used as a proxy measure for the extent of the practical knowledge or skill acquired). The two uncountable senses recognized by *MEDAL* reflect two different kinds of knowledge run together in the previous explanations (*Lexico*1.1 and *Webster*2a): ‘knowledge or time spent doing a job or activity’ (*She has years of experience in the computer industry; Do you have any previous experience with*

⁸ All last accessed on May 27th, 2022.

children?) (MEDAL1) and ‘the knowledge that you get from life and from being in a lot of different situations’ (*Experience told me not to believe him; In my experience, very intelligent people can still make terrible mistakes*) (MEDAL2).⁹ Further dictionary explanations of ‘experience’ as a mass noun are consistent with recognition of this two-fold epistemic use to refer to multifarious epistemic products (empirical knowledge and skills) and their sources.¹⁰

Now obsolete uses as a *count noun* clearly hang together with these epistemic senses and refer to actions and procedures designed to gain knowledge (OED 1a, 1b, 2): ‘an experiment; an operation performed in order to ascertain or illustrate some truth; the action of putting to the test; trial; practical demonstration.’ The most recent examples of these uses listed in the OED are from the eighteenth century. While the experiment-sense survives for the French ‘*expérience*’, still live uses of the English ‘experience’ as count noun are in line with a subtly related, but broader sense referring to actions or events: ‘something personally encountered or lived through’ (Webster 3); ‘an event or occurrence which leaves an impression on someone’ (Lexico 2); ‘an event as apprehended’ (WordNet 3); ‘something that happens to you, or a situation that you are involved in’ (MEDAL 3); ‘something that you do or that happens to you, especially something important that affects you’ (Collins 3). In brief, in this sense the noun is used to refer to events, mainly in talk about how the event struck or affected an agent or other participant (nicely illustrated by an example from Collins: *His only experience of gardening so far proved immensely satisfying*). This corresponds with some of the uses noted by Wierzbicka (2010) in detailing her second set of senses, although the focus is on the event rather than the attitudinal response, as in Hacker (2002).

This use as a count noun is subtly related to the source-of-knowledge use as a mass noun: One way in which an event may affect someone is by providing them with skill or knowledge. Where the mass noun was used to refer to observation of an event and practical contact with its participants, or indefinite numbers of learning events, the count noun can be used to refer to individual such events. This is illustrated by an example from MEDAL: *It was her first experience of dealing with people from another culture—unless exceptionally insensitive, she will have begun to acquire some intercultural communication skills*.

Some dictionaries recognize further senses that are related to one or more of the previous senses: ‘What has been experienced; the events that have taken place within the knowledge of an individual, a community, mankind at large, either during a particular period or generally’ (*profound study of Indian experience*) (OED 6; cf. Webster 4a and 4b). Moreover, the OED groups together the event-sense with extensions into

⁹ Oddly, MEDAL does not recognise a sense referring to the source of this knowledge, but provides an instance of this sense as an example for (MEDAL2): *Helen knew from past experience that there was no point in arguing with him—where ‘past experience’ presumably consists in past interaction with (or ‘practical contact with and observation of’) the man*.

¹⁰ Collins 1 ‘Experience is knowledge or skill in a particular job or activity, which you have gained because you have done that job or activity for a long time’, WordNet 1 ‘the accumulation of knowledge or skill that results from direct participation in events or activities’. Collins 2 ‘Experience is used to refer to past events, knowledge, and feelings that make up someone’s life and character’. Sample sentences (*experience has taught me caution; she had learned from experience to take little rests; ‘if you act afraid, they won’t let you go’, he said, speaking from experience*) bring out this is intended to capture an extension of the source-of-knowledge sense to instructive events, while mixing this up with the previously explained knowledge-sense.

the mental sphere: ‘an event by which one is affected’ and ‘a state or condition viewed subjectively’ (*OED* 4a) are public affairs, as subjectively perceived; ‘in religious use’, the application is extended to ‘a state of mind or feeling forming part of the inner religious life; the mental history (of a person) with regard to religious emotion’ (*OED* 4b). Other dictionaries recognize what look like philosophical uses that push ‘experience’ inwards: ‘the act or process of directly perceiving events or reality’ (*Webster* 5) and ‘the content of direct observation or participation in an event’ (*WordNet* 2). These explanations may be reflective of philosophical uses that employ ‘experience’ to refer to mental acts of being directly presented with something (in perception, etc.) and to the mental objects or contents of such acts.

To sum up the picture emerging from dictionary explanations: As a mass noun, ‘experience’ is used to refer to skills and knowledge and the indefinite number of actions and observations through which they were acquired (*epistemic senses*). As a count noun, the word is used to refer to events, in talk about how these events strike or affect a participant (*event sense*). The events are public affairs (like a gardening effort); the noun is used to refer to them in talk about their subjective aspects (like someone’s enjoyment of it). Further senses, recognized in a minority of the dictionaries we consulted, are used to refer to mental states, acts, or episodes, ostensibly in religious and philosophical discourse (*mental senses*).

Each of the three kinds of uses of the noun corresponds to at least one sense of the verb.¹¹ In a now rare use with direct object and infinitive, or with a that-clause, ‘to experience’ means ‘to learn (a fact) by experience’ (*I have experienced that a landscape and the sky unfold the deepest beauty*) (*OED* 2b, cf. *Webster* 2).¹² A more frequent sense corresponds to the event-sense of the noun: ‘encounter or undergo an event or occurrence’ (*Lexico* 1, cf. *Collins* 1, *MEDAL1*, *OED* 2a; *Webster* 1), often of a negative nature (‘undergo or live through a difficult experience’, *WordNet* 1; cf. *Webster* 1). A third sense of the verb corresponds to the mental senses of the noun: ‘feel an emotion or sensation’ (*Lexico* 2, cf. *Collins* 2, *MEDAL2*, *WordNet* 4).¹³ Finally, two dictionaries recognize a transferred sense of the verb that extends also to inanimate objects: ‘to meet with, undergo’ (*Holland often experiences a degree of cold*) (*OED* 2c; cf. *WordNet* 5).

4 Corpus study

As noted, philosophers of mind standardly use ‘experience’ as a synonym for ‘phenomenal consciousness’ or ‘phenomenally conscious mental state’. Further, they often take this to reflect the ordinary usage of the term, or at least a prominent usage of the

¹¹ In addition, the now obsolete experiment-sense of the noun corresponds to the now equally obsolete sense ‘To ascertain or prove by experiment or observation’, ‘to make trial or experiment of; to put to the test’ (*OED* 1).

¹² *WordNet* explains a more specific epistemic sense also related to the event-sense and the mental senses of the noun: ‘have first-hand knowledge of states, situations, emotions, or sensations’ (*WordNet* 2). The *OED* records a now obsolete epistemic sense: ‘to give or gain experience’ (*OED* 3), e.g., ‘to train (soldiers)’ (*OED* 3a).

¹³ *WordNet* provides an explanation to cover both the second and the third sense: ‘go through (mental or physical) states or experiences’ (*WordNet* 3).

term, not simply a technical sense employed in philosophy. But lexicographic evidence (Sect. 3) reinforces the previously reviewed evidence (Sect. 2) that suggests this assumption might not hold. To examine the assumption more carefully, we turn to the methods of corpus linguistics.¹⁴

4.1 Samples

The primary goal of our study was to examine the ordinary, non-academic use of experience talk. For this, we used the non-academic sections of the *Corpus of Contemporary American English* (COCA).¹⁵ We drew random samples of 100 uses of ‘experience’ and 100 uses of ‘experiences’, pulling the extended context for each to aid classification (roughly 250 words on average). For comparison, we drew a second set of samples from philosophy journals. For this, we used a selection of 10 top-rated general philosophy journals available electronically through JStor.¹⁶ Articles were restricted to those coming out in 1990 or later to correspond with the date range for COCA. This provided 5,260 articles including ‘experience’ and 3,050 including ‘experiences’. We then used a random number generator to select 100 articles from these for each term. For each article, we tabulated the number of occurrences of the key word, and when it occurred more than once we used a random number generator to select a single occurrence for classification. As before, we pulled the extended context for each to aid classification. In addition, we looked up the top-level classifications for each article on the *PhilPapers* database, noting whether it was included in the ‘philosophy of mind’ category. Finally, as a further comparison, we drew random samples of 100 uses for each term from the academic section of COCA, again pulling the extended context for each. The result was a set of 600 items for classification.¹⁷

For non-academic COCA, we found that ‘experience’ comprised 0.018% of the total words (160,329 occurrences out of 873,232,275 words) and that ‘experiences’ comprised 0.0035% of the total words (30,212 occurrences). By contrast, for academic COCA, ‘experience’ comprised 0.044% of total words (52,701 occurrences out of 119,790,456 words) and ‘experiences’ comprised 0.021% (24,701 occurrences). Thus, while neither term is used with great frequency, this suggests that these terms are relatively more common in academic writing, with ‘experience’ being used 2.4 times

¹⁴ Corpus linguistics aims to collect ‘real world’ linguistic data into general or domain-specific collections, or corpora, and analyze these for purposes of answering research questions (McEnery & Hardie, 2015; O’Keefe & McCarthy, 2022). In recent years, the use of linguistic corpora has become more common in philosophy, coming to be an important method among experimental philosophers. For discussion see Bluhm (2016), Sytsma et al. (2019), Caton (2020), and Fischer and Sytsma (2023); for an extensive, if incomplete, set of English-language references, see Sytsma (2023).

¹⁵ COCA is the most common corpus in recent work in experimental philosophy, providing a contemporary, balanced corpus of some 1 billion words from a range of sources, including magazines, newspapers, blogs, webpages, books, academic articles, transcripts, and subtitles: <https://www.english-corpora.org/coca/>

¹⁶ Journals were based on the 2018 ranking from the Leiter Reports blog (<https://leiterreports.typepad.com/blog/2018/11/best-general-journals-of-philosophy-2018.html>). 10 of the top 12 general journals were available on JStor: *The Philosophical Review*, *Mind*, *Noûs*, *The Journal of Philosophy*, *Philosophy and Phenomenological Research*, *Philosophical Studies*, *The Philosophical Quarterly*, *Analysis*, *Synthese*, and *Canadian Journal of Philosophy*.

¹⁷ All samples collected in March 2022.

more frequently and ‘experiences’ 6 times more frequently than in non-academic COCA. For both sections, the terms are primarily used as nouns, with just 15.8% of the uses of ‘experience’ and 2.3% of the uses of ‘experiences’ in the non-academic sections employing the word as a verb, compared with 17.1% and 1.4%, respectively, in the academic section.

4.2 Coding scheme

To examine our samples, we developed a coding scheme based on the dictionary definitions discussed in the previous section. This scheme was then tested by each of us independently coding a sub-set of items from COCA, followed by comparing the results and discussing areas of disagreement. The coding scheme was refined on this basis. Further, we found that while the primary noun-senses were distinguished based on the use of ‘experience’ as a mass noun (1) or a count noun (2), with the mass senses primarily corresponding with the acquisition of knowledge or skill and the count senses primarily corresponding with participation in events, not all items neatly followed this division: for instance, we found items where ‘experience’ was used as a mass noun and yet the emphasis was on (an indefinite number of) events not involving the acquisition of any knowledge or skill. As such, we allowed the item classifications to diverge from corresponding mass/count judgments.

For ease of presentation, we now present the coding scheme, with reference to relevant dictionary explanations (referencing first the one that best captures the category we intended). We then explain the rationale of any significant modifications, additions, and omissions.

Noun

N1 Knowledge or skill or their source

- N1.1 Knowledge or skill acquired through time spent doing a job or activity (MEDAL1; Collins1, Lexico1.1, Webster2a, WordNet1)
- N1.2 Knowledge or skill acquired through being in a lot of different situations (MEDAL2; OED7, Webster2a, WordNet1)
- N1.3 An indefinite number of learning events involving practical contact or observation of facts or events, through which knowledge or skill is acquired. (Lexico1; Collins2, OED3, Webster 1a)
- N1.4 An indefinite number of learning events involving engagement in practical activity, through which knowledge or skill is acquired.
- N1.5 Length of time of such learning (duration of contact or observation or activity) (Webster2b)

N2 Event/situation you are involved in (as agent, patient, or witness) (MEDAL3; Collins3, Lexico2, OED4a, Webster3, WordNet3)

- N2.1 Individual events leading to the acquisition of knowledge or skill (like 1.3 above, but used as count noun), ca. ‘contacts with and observations of facts or events’

- N2.2 Individual events leading to the acquisition of knowledge or skill (like 1.4 above, but used as count noun), ca. ‘engagements in practical activities’
- N2.3 The way an event/situation strikes or affects a person involved in it (postulated to account for COCA items)
- N2.4 A place that is the location of an event/situation you are involved in (postulated to account for COCA items)

N3 a mental event or episode of a person’s mental life or kind thereof (*cf.* Webster 4a), in particular an episode of ‘experiencing’ an emotion, sensation, or cognitive process/achievement (in senses V3-V4, below), often conceptualised as part of a ‘stream of consciousness’ involving the introspective viewing of mental images (involving an act directed towards an object). The noun may then, more specifically, refer to:

- N3.1 the mental act of being directly presented with or forming something (in perception, imagination, etc.) (Webster5)
- N3.2 the mental object of that act (sense-datum, percept, image, etc.) or its content (WordNet2)
- N3.3 a representation involved in perception, imagination, etc., that has a phenomenal ‘feel’ to it (regardless of whether the author endorses any ‘stream of consciousness’ or ‘act/object’ conception).

N4 the (sum of) past events that a community was involved in/belong to its collective history. (Merriam Webster 4b)

Verb

- V1 Encounter or have a problem etc or other valenced object (MEDAL1, WordNet1)
- V2 be involved in an event, undergo or be in a situation, or undergo a (public, or physical) development or process (MEDAL1; Lexico1, Collins1, OED2a, WordNet2, Webster1)
- V3 have or feel an emotion or physical feeling (MEDAL2; Collins2, Lexico1.1, OED2a, WordNet4)
- V4 undergo a mental process or bring off a cognitive achievement, including perceiving, interpreting as, getting an idea, etc. (WordNet3)

Most categories were straightforwardly derived from the dictionary explanations listed against them, interpreting explanations in the light of the sample sentences provided. We went beyond these explanations at the following points: We introduced top-level class **N1**, to be able to classify occurrences that were ambiguous between the knowledge-sense and the source-of-knowledge sense. We then took into account the relationship between the event-sense and the source-of-knowledge sense commented on above, and conceptualised the latter as referring, as a default, to an indefinite number of learning events, in framing **N1.3**. Since **N1.3** is geared towards talk of sources of the kind of knowledge referred to by **N1.2**, we added **N1.4**, to capture uses that would refer to sources of the kind of knowledge or skill referred to by **N1.1**. Again reflecting on

the relationship between the countable event-sense and the mass source-of-knowledge sense, we added to the top-level event-sense **N2** the sub-categories **N2.1** and **N2.2**, to be able to classify any count noun uses that would refer to individual learning events, corresponding to the kinds of sources of knowledge referred to by **N1.3** and **N1.4**, respectively.

During our test-annotations, we then added further sense-categories, where uses we encountered did not fit any of the extant categories but fit a new category that stood in a straightforward relationship to one of the extant categories that metaphorical extension could exploit. We thus added **N2.3** and **N2.4**. Since the event-sense is used to talk about how events strike participants, the addition of **N2.3** ('the way an event strikes a participant') seemed straightforward. We added **N2.4** ('location of an event you are involved in') because an occurrence (referring to a garden as 'a sensory experience to surprise and delight') appeared to work in the opposite direction of familiar rules of metonymy (location for event that takes place there, e.g., 'Wimbledon' to refer to the tennis tournament), so that a new sense needed positing to account for it. Test-annotations of the philosophy corpora led to addition of **N3.3**. Test-annotations of the COCA samples revealed uses of the verb in talk of encountering positively, rather than negatively valenced objects ('blessings' and 'freedoms'), motivating adding 'or other valenced object' to the pertinent dictionary explanations of **V1**. Similarly, test-annotations of the philosophy sample led to adding 'or undergo a (public or physical) development or process' to **V2**, and explicit reference to the achievements of perceiving and interpreting-as to **V4**.¹⁸

4.3 Coding

The 600 items were independently coded by the authors, using the scheme described above. For each item, we classified whether it was a noun or a verb, for nouns whether it was a mass noun or a count noun, and selected the entry number that seemed most appropriate. Where possible, we selected a sub-entry (for instance, selecting **N1.1**, where appropriate, rather than just **N1**). We aimed to select an entry wherever possible, going with our best guess when it was unclear, but adding a second-choice entry when we were relatively uncertain. In coding, we found that two items were repeated, one in the set for 'experiences' for non-academic COCA and one in the set for 'experiences' for academic COCA. The duplicates were removed.

We then compared our codings, tallying the items where our first-choices agreed on the *top-level* classification and the items where we agreed on the *sub-level* classification. Top-level classification was generally easier than sub-level, with it often being clear that a given use was, for instance, an instance of **N1**, but less clear whether it was specifically **N1.1** or **N1.2**. As such, we'll report both top-level agreement and sub-level agreement.¹⁹ Both top-level and sub-level agreement were strong, with top-level agreement being especially pronounced, as shown in Table 1. Across the items, we

¹⁸ To avoid clutter, we omitted senses the OED suggested are becoming obsolete, such as 'to learn (a fact) by experience' (OED 2b, Webster 2).

¹⁹ For top-level agreement, we included items where each coder classified an item as an instance of **N1** or one of its sub-levels, as **N2** or one of its sub-levels, as **N3** or one of its sub-levels, as **N4**, or as a verb. For

Table 1 Coder agreement by sample set, broken down by top-level and sub-level

	'experience' Non-academic	'experience' Academic	'experience' Philosophy	'experiences' Non-academic	'experiences' Academic	'experiences' Philosophy
Top-level	93% (93/100)	92% (92/100)	87% (87/100)	98% (97/99)	93% (92/99)	96% (96/100)
Sub-level	79% (79/100)	71% (71/100)	70% (70/100)	81% (80/99)	68% (67/99)	75% (75/100)

showed 93.1% top-level agreement and 73.9% sub-level agreement. Further, a large majority of sub-level disagreements where there was top-level agreement reflected uncertainty on our part (88.8%), with one of us indicating a second choice that agreed with the other in 31.6% of the cases and one of us just giving a top-level classification in 66.7% of the remaining cases.

The average top-level judgment across our codings, before attempting to resolve disagreements, is shown in Table 2 for each set of items. This gives an initial indication that, contra common suggestions by philosophers of mind, the mental state sense of ‘experience’ and ‘experiences’ (N3) is quite uncommon in ordinary use, with this coding being used for just 3% of items. In contrast, this sense is more common for academic writing (12% and 8.1% respectively), and especially for philosophical writing (32.5% and 75% respectively). Even in philosophical writing, however, we find that ‘experience’ is not primarily used in the mental state sense, although ‘experiences’ is.

After our initial codings, we jointly went through the items where we indicated top-level disagreement. In discussion we were able to resolve 31 of the 41 disagreements, with the remaining 10 being judged to be unclassifiable because they were ambiguous between multiple senses. These items were removed from the subsequent analysis. Sub-level disagreements were resolved, first, by using second choice judgments (if a second choice matched the other annotator’s first choice, this sense was selected) and, second, by reverting to the top-level judgment (e.g., if we disagreed between N1.3 and N1.4, the item was resolved as N1). The resulting resolved judgments are summarized in Table 3.

4.4 Analysis

The first thing to note is that, against the common assumption in philosophy of mind, mental state uses of our target terms do not appear to be common in ordinary English. Indeed, only three items were coded as falling under N3 (where this includes its sub-entries, N3.1, N3.2, or N3.3) for ‘experience’ and two for ‘experiences’ in the samples drawn from non-academic COCA. Further, each of these items is at least quasi-academic, despite occurring in the non-academic sections. For ‘experience’, the first instance falling under N3 was in a quote from the Neo-Freudian psychiatrist and psychoanalyst Harry Stack Sullivan, the second occurs in an article in *The American Scholar* by a professor at Yale, and the third comes from a professor at Johns Hopkins in an interview on *60 Minutes*. For ‘experiences’, the first occurrence falling under N3 was in a discussion of philosopher John Martin Fischer’s work on near-death experiences, while the second was in a discussion of a central text of Sikhism. In other words, we did not encounter any uses of N3 or its subcategories in genuinely non-academic discourse contexts.

Instead, what we find is that ‘experience’ is predominantly used as a noun to refer to acquired knowledge or skill, their source, or participation in events that affected the person. Thus, we find a near equal split between items falling under N1 and N2. All instances of N1 or its sub-entries involved the use of ‘experience’ as a mass

Footnote 19 continued

sub-level agreement, we included only items where we agreed in lowest-level classification (e.g., N1 and N1.1 counted as disagreement).

Table 2 Initial top-level judgments averaging across coders for each sample set

	'experience' Non-academic	'experience' Academic	'experience' Philosophy	'experiences' Non-academic	'experiences' Academic	'experiences' Philosophy
N1	43% (86/200)	41% (82/200)	38% (76/200)	0% (0/198)	0% (0/198)	0% (0/200)
N2	42% (84/200)	28% (56/200)	13.5% (27/200)	92.9% (184/198)	83.3% (165/198)	15% (30/200)
N3	3% (6/200)	12% (24/200)	32.5% (65/200)	3.0% (6/198)	8.1% (16/198)	75% (150/200)
N4	3% (6/200)	6% (12/200)	0% (0/200)	2.0% (4/198)	4.5% (9/198)	0% (0/200)
V	10% (20/200)	13% (26/200)	16% (32/200)	2.0% (4/198)	4.0% (8/198)	10% (20/200)

Table 3 Resolved judgments for each sample set, showing 95% Confidence Intervals in square brackets for top-level codings

	'experience' Non-academic	'experience' Academic	'experience' Philosophy	'experiences' Non-academic	'experiences' Academic	'experiences' Philosophy
N1	7.1% (7/98)	9% (9/100)	2% (2/100)			
1.1	8.2% (8/98)	6% (6/100)	1% (1/100)			
1.2	3.1% (3/98)	4% (4/100)	3% (3/100)			
1.3	9.2% (9/98)	9% (9/100)	30% (30/100)			
1.4	12.2% (12/98)	13% (13/100)				
1.5	4.1% (4/98)	1% (1/100)				
	43.9% (43/98) [34.1%, 53.7%]	42% (42/100) [32.3%, 51.7%]	36% (36/100) [26.6%, 45.4%]			
N2	24.5% (24/98)	13% (13/100)	9% (9/100)	78.4% (76/97)	55.2% (53/96)	11.3% (11/97)
2.1			4% (4/100)	10.3% (10/97)	5.2% (5/96)	3.1% (3/97)
2.2	4.1% (4/98)	1% (1/100)		5.2% (5/97)	24.0% (23/96)	
2.3	11.2% (11/98)	11% (11/100)			2.1% (2/96)	
2.4	1.0% (1/98)					
	40.8% (40/98) [31.1%, 50.5%]	25% (25/100) [16.5%, 33.5%]	13% (13/100) [6.4%, 19.6%]	93.8% (91/97) [89.0%, 98.6%]	86.5% (83/96) [79.6%, 93.3%]	14.4% (14/97) [7.4%, 21.4%]
N3	3.1% (3/98)	11% (11/100)	32% (32/100)	2.1% (2/97)	5.2% (5/96)	71.1% (69/97)
3.1		1% (1/100)				
3.2		1% (1/100)	1% (1/100)			4.1% (4/97)
3.3	3.1% (3/98) [0%, 6.5%]	13% (13/100) [6.4%, 19.6%]	35% (35/100) [25.7%, 44.3%]	2.1% (2/97) [7.4%, 21.4%]	5.2% (5/96) [0.8%, 9.7%]	75.3% (73/97) [66.7%, 83.8%]

Table 3 (continued)

	'experience' Non-academic	'experience' Academic	'experience' Philosophy	'experiences' Non-academic	'experiences' Academic	'experiences' Philosophy
N4	2.0% (7/98) [2.0%, 12.2%]	7% (7/100) [2.0%, 12.0%]	0% (0/100)	2.1% (2/97) [0%, 4.9%]	4.2% (4/96) [0.2%, 8.2%]	0% (0/97)
V		1% (1/100)	2% (2/100)	2.1% (2/97)	1.0% (1/96)	2.1% (2/97)
1	1.0% (1/98)	8% (8/100)				
2	6.1% (6/98)	2% (2/100)	3% (3/100)		2.1% (2/96)	2.1% (2/97)
3	2.0% (2/98)	2% (2/100)	7% (7/100)		1.0% (1/96)	4.1% (4/97)
4	1.0% (1/98)		4% (4/100)			2.1% (2/97)
	10.2% (10/98) [4.2%, 16.2%]	13% (13/100) [6.4%, 19.6%]	16% (16/100) [8.8%, 23.2%]	2.1% (2/97) [0%, 4.9%]	4.2% (4/96) [0.2%, 8.2%]	10.3% (10/97) [4.3%, 16.4%]

Bold entries show summed judgments for top-level and sub-levels

noun. Items were split between uses that emphasized knowledge or skill (e.g., ‘work a couple years to get experience’, ‘in my experience... the old country is not idolized’) and items that emphasized their source (e.g., ‘having personal experience of a relative with dementia’, ‘has anyone had experience using this’), although many items were ambiguous between the two. Interestingly, while items falling under **N2** were primarily judged to use ‘experience’ as a count noun (23/40, 57.5%), a notable proportion (11/40, 27.5%) used it as a mass noun. These cases standardly referred to an indefinite number of events without suggesting a direct concern with knowledge or skill acquired through them, such as in ‘Curtis wanted a small-school experience’ and ‘there was a time when college was a pretty bare-bones experience’. By contrast, when used as a noun in our sample, ‘experiences’ was exclusively judged to be a count noun, with the vast majority of instances coded as **N2** or its sub-entries. Typically these items involved reference to an indefinite number of events of a given type, often with an emphasis on how they impact the agent, such as in ‘I’m really uncomfortable with you characterizing queer men’s experiences of street harassment and violence as being unimportant’.

Turning to the academic samples from COCA, we found slight jumps in mental state uses compared to the non-academic samples, with items falling under **N3** comprising 13% of our sample for ‘experience’ and 5.2% for ‘experiences’.²⁰ Further, it is worth noting that once again many of these uses occur in philosophical discussions. For example, we find instances in items concerning Montaigne, Locke, the ‘Cartesian–Kantian condition’, Husserl’s phenomenology, William James’s philosophical method, and Popper’s work on dualism, among others.

There is a quite notable further jump in mental state uses in the philosophy samples, with more than one-third of the items for ‘experience’ and three-fourths for ‘experiences’ being coded as **N3** or its sub-entries. This is significantly greater than the proportion for the general academic sample for each term.²¹ Interestingly, even in the philosophy texts examined, ‘experience’ is most often used in other senses. This includes that it is frequently used to indicate a source of knowledge, such as in the following passage on the problem of induction: ‘based solely on our experience of the past, the generalisations cannot be shown to differ in their probabilities’ (Sober 1994, 236; quoted in Ward 2012).

Next, we examined differences in usage between the philosophy of mind and other areas of philosophy. Categorizations were available on PhilPapers for 97 of the articles in the philosophy sample for ‘experience’. 29 of these were categorized as belonging to the philosophy of mind. A notable difference emerged between these and the remaining 68 articles: Of the uses of ‘experience’ annotated in the latter, only 16 (23.5%) were coded as **N3** or its sub-entries. By contrast, a majority of the items for the articles in philosophy of mind were coded this way (19/29, 65.5%). Indeed, the proportion of mental state uses was significantly higher in the articles that were categorized under philosophy of mind than the articles that were not.²² A similar finding held for ‘experiences’. Of 94 articles categorized on PhilPapers, 43 fell under ‘philosophy of mind’.

²⁰ The increase was statistically significant for ‘experience’ ($\chi^2 = 5.31, p = .011$, one-tailed), but not for ‘experiences’ ($\chi^2 = .61, p = .22$, one-tailed).

²¹ $\chi^2 = 12.1, p < .001$, one-tailed; $\chi^2 = 106.5, p < .001$, one-tailed.

²² $\chi^2 = 13.8, p < .001$, one-tailed.

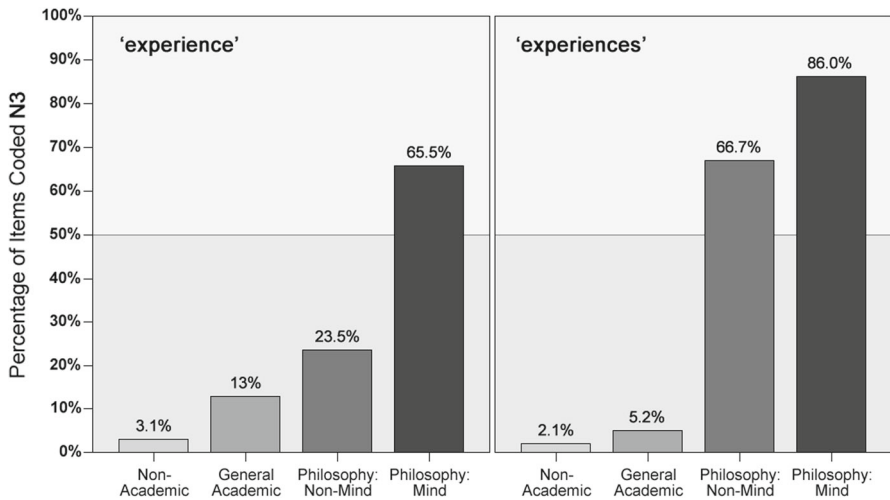


Fig. 1 Percentage of items used in a mental state sense in sample, with the philosophy sample split based on whether the article is categorized as Philosophy of Mind or not on PhilPapers

Items from nearly all of these were coded as **N3** or its sub-entries (37/43, 86.0%), and this proportion was significantly higher than for the articles not categorized as philosophy of mind (34/51, 66.7%).²³ To sum up, not only are philosophers significantly more likely to use ‘experience’ and ‘experiences’ in a mental state sense than either other academics or lay people, but work in philosophy of mind is significantly more likely to use the terms in this way than work in other areas of philosophy (see Fig. 1).

In general, we were unable to clearly determine sub-types for the mental state uses of our target terms, although there were some clear phenomenal uses in the philosophy of mind articles, such as:

The default moral of our two versions of the Mary challenge is that phenomenal properties are not broadly physical properties: they are neither identical to, nor conceptually supervenient upon, properties of the kind posited by physics and by the other natural sciences. Rather, they are non-physical properties with which one becomes directly acquainted in experience. Phenomenal concepts and phenomenal knowledge are grounded in this direct acquaintance. Phenomenal consciousness, and the knowledge of what is like, are surprising and unexpectedly delightful to Mary because they involve acquaintance with genuinely new, non-physical, properties. (Graham & Horgan, 2000, pp. 75–76)

Not surprisingly, the articles in philosophy of mind tended to use our target terms quite extensively, no doubt reflecting that experience (in the mental state sense) is a prominent topic of investigation in this area. In line with this, looking at the number of occurrences of our target terms in the philosophy samples, we found that ‘experience’ was used an average of 26.8 times per article for the works categorized as philosophy of mind, which is significantly greater than for the other works represented in our

²³ $\chi^2 = 3.75, p = .026$, one-tailed.

philosophy corpus, where ‘experience’ was used just 6.5 times per article on average.²⁴ Similarly, ‘experiences’ was used an average of 13.0 times per article for those classified as philosophy of mind, compared to 4.7 times per article for the remaining works in the sample.²⁵

A similar finding held when looking at how the items were coded, with articles where the selected instance was used in a mental state sense tending to use the term far more frequently, in any sense, than articles that used it in another sense. For ‘experience’, the average number of occurrences in the articles where the selected instance was coded as **N3** or its sub-entries was 24.9, which was significantly higher than for the remaining articles, which had an average of 5.5.²⁶ And similarly for ‘experiences’, where the instances coded as **N3** or its sub-entries were in articles where the term was used 10.5 times on average, compared to just 2.3 times on average in the remaining articles.²⁷

Finally, we turn briefly to the verb classifications. Given that only 9.4% (55/588) of our items were classified as verbs, conclusions must remain tentative. Nonetheless, we find a similar pattern to that found for nouns, with the senses emphasizing mental states (**V3**, **V4**) being notably higher in the philosophy samples than either the non-academic or the general academic samples. ‘Experience’ and ‘experiences’ are simply conjugated forms of the verb and do not align with a philosophically interesting distinction, such as the mass versus count distinction for nouns; e.g., they do not align with the distinction between first-person and other perspectives (‘experience’ being used for both first and second person singular and all persons plural). We therefore combined the two sets of samples for analysis. While only a minority of the verb uses for the non-academic samples involved senses that emphasized mental states (3/12, 25%), and similarly for the general academic samples (3/17, 17.6%), a majority for the philosophy sample did so (17/26, 65.4%). These differences are statistically significant.²⁸

Moreover, as with the nouns, even these numbers likely overstate the usage in non-academic English, as one of the three instances from the non-academic sample is from a pseudo-philosophical website focused on ‘spiritual and metaphysical topics’ (‘if you suddenly make a discrete shift in beliefs, you will experience a sudden discrete shift in your Now reality’), while neither of the other two obviously suggests a phenomenal reading (‘the paranoia that white people experience out of fear of losing power is extreme’, ‘caffeine, nicotine both influence dopamine (and other pathways) [as such] it’s not surprising you experience more energy and “pop”’). By contrast, the philosophical samples involved several clear phenomenal uses, such as in the following discussion of phenomenal concepts from Michael Tye (2001, p. 695): ‘If I focus introspectively on the feeling of pain, as I experience it, I form a conception of how it feels, and the concept that enables me to do that is not one that I apply to the feeling

²⁴ $t(31.323) = 3.02, p = .0025$.

²⁵ $t(51.56) = 2.71, p = .0046$.

²⁶ $t(36.911) = 3.27, p = .0012$.

²⁷ $t(65.229) = 1.95, p = .027$.

²⁸ Non-academic versus Philosophy: $\chi^2 = 3.87, p = .025$, one-tailed; General Academic versus Philosophy: $\chi^2 = 7.59, p = .0029$, one-tailed.

by discerning non-phenomenal features that aid in the identification of its phenomenal character.’

5 Concluding remarks

It is common in philosophy of mind to use ‘experience’ as a synonym for ‘phenomenal consciousness’ and ‘phenomenally conscious mental state’. Indeed, experience talk is often taken to be an ordinary-language analog for these technical terms. But we’ve seen that there is reason to doubt that this is actually the case. The new corpus study reported above provides further evidence that outside of academic discussions ‘experience’ is seldom, if ever, used to refer to phenomenal consciousness or phenomenally conscious mental states or episodes. In fact, our results suggest that, in non-academic discourse, ‘experience’ is not used to refer to mental states or episodes in the first place, whether phenomenal or otherwise. Further, it is used this way only sparingly in academic discourse outside philosophy. And even in philosophy, this use is clearly dominant across declined forms only in the philosophy of mind.

This finding is philosophically suggestive: Taking phenomenal consciousness to be a manifest and important feature of our mental lives, many proponents expect laypeople to have formed a folk conception of it, and for the folk conception to have been lexicalized in English, commonly regarding ‘experience’ as its lexicalization. The fact that our corpus study identified no clear occurrences of the mental sense in non-academic samples speaks against this idea. This provides a negative critique of a common argument for phenomenal realism. This critique is consistent with the alternative suggestion that the concept of phenomenal consciousness is an artefact of philosophical theorizing that realists then read into ordinary language, perhaps as a matter of common confirmation bias (Nickerson, 1998). Accepting the phenomenal realists’ assumption that a pretheoretically obvious aspect of our mental lives will give rise to a corresponding folk concept that is lexicalized in natural languages, including English, the present findings also give us positive reason to doubt the existence of a folk conception of phenomenal consciousness—and with it the very existence of the phenomenon itself.

The most obvious rejoinder to this sweeping philosophical suggestion is that the folk conception of phenomenal consciousness is lexicalized by a different word, although it isn’t clear what terms might do this work, especially given the notorious diversity of uses of ‘consciousness’ itself (Block, 1996; Chalmers, 1996). To facilitate an initial assessment of this rejoinder, we sought to identify plausible candidate expressions. To do so, we asked which ordinary words philosophers use with the most similar meanings to ‘experience’ in its philosophical sense (N3). To address this question, we used a distributional semantic model (DSM) built by Sytsma et al. (2019) using the word2vec algorithm for the full text of the *Stanford Encyclopedia of Philosophy* and *Internet Encyclopedia of Philosophy*. Such models can suggest the most semantically related terms to a target word based on the contexts in which they are used in a corpus. We used the model to identify the terms semantically most similar to the target word ‘experience’. (Unfortunately, the more pertinent ‘experiences’ did not occur sufficiently often in the SEP-IEP corpus to appear in the DSM.) The twelve nearest

neighbours that stood out in terms of semantic similarity included precisely three familiar nouns distinct from ‘experience’ and its derivatives: ‘perception’, ‘awareness’, and ‘sensation’.²⁹

The first two words, however, are doxastic or epistemic terms. Specifically, ‘perception’ ordinarily refers either to ‘a particular way of understanding or thinking about something’ (MEDAL1; Collins1), the ‘ability to notice something by seeing, hearing, or smelling, etc.’ (MEDAL2; Collins3; Webster3), or the ‘ability to understand and make good judgments about something’ (MEDAL3; Collins2; Webster4). And ‘awareness’ ordinarily refers to ‘knowledge or understanding of a subject, issue, or situation’ (MEDAL1; Lexico; Webster, WordNet 1) or the ‘ability to notice things’ (MEDAL 2; cf. ‘sentience’, WordNet2); ‘if you are aware of something, you know about it’ (Collins). A forced-choice plausibility ranking task provides evidence that the epistemic implications of ‘perceive’ and ‘be aware of’ are stronger than the defeasible epistemic implications of ‘see’ and ‘hear’: Where sequels cancelled implications of knowledge, people deem statements with ‘see’ and ‘hear’ more plausible than otherwise identical statements with ‘perceive’ and ‘aware of’, even when word frequencies do not influence their judgments (Fischer & Engelhardt, 2016). ‘Sensation’ seems to be a less bad candidate for a lexicalization of our target concept in English, being explained as ‘physical feeling’ (MEDAL1; Collins1), ‘a feeling, especially a strange one, caused by a particular experience [in sense N2] (*He had the uncomfortable sensation of being watched*)’ (MEDAL2; Collins3), and ‘ability to feel something, especially by touching it’ (MEDAL3; Collins2). However, while sensations are common examples of what philosophers regard as phenomenally conscious mental states or events, the alleged folk conception of phenomenal consciousness is meant to cover many further kinds of states, including, especially, perceptual states that, in line with their more epistemic nature, laypeople do not group with sensations (Ozdemir, 2022; Sytsma & Machery, 2010).

In the absence of a clear alternative term in English for the technical phrases that philosophers use to discuss phenomenal consciousness, proponents might offer a second rejoinder: they might accept that the concept of phenomenal consciousness is not lexicalized in ordinary English, but contend that despite this the concept is widespread—that it is nonetheless a folk concept. Here it might be argued that the concept is generally implicit, perhaps because lay people do not typically have reason to specifically discuss phenomenal consciousness, or that English is simply an outlier in this regard with the concept being lexicalized in other languages.³⁰ Further work is required to rule out either of these options. Nonetheless, the corpus study presented helps shift the burden of proof. The availability of a plausible lexicalization in ordinary English has frequently been regarded as an important piece of evidence that a folk concept of phenomenal consciousness exists. Our corpus study shows this evidence to be spurious. Moreover, Sect. 2 briefly surveyed evidence suggesting that lay people do not tend to employ the concept of phenomenal consciousness in settings where philosophers do

²⁹ The nearest neighbors to ‘experience’ in the DSM as measured by cosine (shown in parentheses) were: ‘experiential’ (0.73), ‘experienced’ (0.71), ‘perception’ (0.67), ‘experiencer’ (0.65), ‘awareness’ (0.65), ‘phenomenally’ (0.62), ‘sensation’ (0.61), ‘tactile’ (0.60), ‘givenness’ (0.60), ‘experientially’ (0.60), ‘perceptual’ (0.59), and ‘sensa’ (0.59).

³⁰ We want to thank two anonymous reviewers for raising these possibilities.

so. We therefore contend that scepticism is warranted with regard to the claim that the concept is widespread among lay people, at least and until other evidence is produced.

This paper has assessed the linguistic claim that ‘experience’ is typically used in ordinary English in a way that roughly captures the philosophical concept of phenomenal consciousness. The results of our corpus study suggest this claim is mistaken. As we’ve seen, however, the linguistic claim is offered as evidence that phenomenal consciousness is a folk concept. The existence of this folk concept is in turn taken to show that the existence of phenomenal consciousness is pretheoretically obvious, which is treated as evidence that phenomenal consciousness exists. If this reasoning is accepted, then our results point to a set of stronger conclusions, raising doubts about each step in the chain and culminating in scepticism about the existence of phenomenal consciousness. On their own, we do not believe that the results of the present linguistic examination would warrant this conclusion. But they add to the evidence noted above, as well as concerns about the very intelligibility of philosophical experience talk (e.g., Hacker, 2002). Indeed, the technical philosophical sense of ‘experience’ as a phenomenally conscious mental state or episode with strangely ineffable qualitative properties gives rise to serious philosophical problems. Whether these problems are well-posed is a matter of considerable controversy (e.g., Dennett, 1991; Diaz, 2021; Fischer & Sytsma, 2021; Frankish, 2016; Graziano, 2022), but skeptics suggest they are problems we can avoid, taking the concept of phenomenal consciousness to be an unneeded philosophical construction (e.g., Noë & O’Regan, 2002, Jaworski, 2020)—which might then bias theorists’ interpretation of ordinary discourse.

While further work on the ordinary use of ‘experience’ and supposedly related terms—as well as candidate terms in other languages—is required to confirm present findings and further examine their philosophical relevance, in closing we want to consider the question of how philosophers came to mistake their technical usage for ordinary English. Answers here are necessarily speculative, but they motivate further examination of the suggestion that the concept of phenomenal consciousness is an artefact of philosophical theorizing that realists then read into ordinary language. Specifically, we’ve seen that one common type of ordinary use of ‘experience’ is to refer to public events that elicit notable attitudinal responses, such as reporting that ‘going skydiving was an exhilarating experience’. And we have seen that it is apparently easy to shift the focus in such cases from the event to the response—from the skydiving to the exhilaration—as arguably occurs in Wierzbicka’s (2010) analysis (see Sect. 2). Of course, this alone does not secure a phenomenal reading of ‘experience’. But if you’re theoretically inclined to understand emotions and ordinary perceptual episodes in terms of phenomenal states to begin with, then such extensions of the ordinary use of ‘experience’ will lend themselves to such a reading.

To illustrate, recall Wierzbicka’s claim from above that ‘there is no word in English (or other known human languages) covering both what one sees and what one feels’ (2019, p. 264). Chalmers (2020, p. 237) expresses doubt about this, writing that ‘at least in my dialect of English, the word “experience” covers both feeling and seeing’. In support, he notes that ‘one can experience disappointment and experience a concert’ and judges that such ‘use of “experience” at least in my dialect expresses a unified notion of phenomenal consciousness’ (p. 237). While the extended event of attending a concert will involve seeing (and, hopefully, hearing) a variety of things, it clearly

involves much more besides. From the perspective of deep theoretical engagement with these debates in philosophy of mind, however, it is natural to focus on the dominant perceptual aspect of attending such an event, interpret this aspect in terms of phenomenal states, and take ‘experience’ to refer to these states. The familiar word then seems to cover both these perceptual states and attitudinal responses (e.g., feelings of exhilaration or disappointment) to the physical event at issue.

A similar point can be made for the other common noun senses we discussed, where ‘experience’ is used to refer to accumulated knowledge/skills or their source. Consider the following passage from Lewis:

They say that experience is the best teacher, and the classroom is no substitute for Real Life. There’s truth to this. If you want to know what some new and different experience is like, you can learn it by going out and really having that experience. You can’t learn it by being told about the experience, however thorough your lessons may be. (Lewis, 1999, p. 262)

Here we see an interesting shift from a common phrase using ‘experience’ as a mass noun to an explanation that uses it as a count noun, and from there to interpreting the saying in terms of phenomenal mental states. Lewis continues:

Experience is the best teacher, in this sense: having an experience is the best way or perhaps the only way, of coming to know what that experience is like. No amount of scientific information about the stimuli that produce that experience and the process that goes on in you when you have that experience will enable you to know what it’s like to have the experience. (Lewis, 1999, p. 263)

The saying that ‘experience is the best teacher’ is a clear example of the term’s use to refer to the source of knowledge or skill. Lewis seems to treat this as somewhat puzzling, however, giving it a different reading. Interpreting ‘experience’ in terms of phenomenal states, Lewis offers an explanation that turns the saying into a potential Mary-style argument against physicalism (in fact, this introduces discussion of the Knowledge Argument): the only way to know qualia is to have relevant phenomenally conscious mental states. And in so doing, he shifts a common phrase from its ordinary meaning to a technical one.

Such shifts need not be problematic. However, given the philosophical problems noted above with the technical sense of ‘experience’, we hold that this is a shift that should not be taken lightly. The present corpus study shows that the uses of ‘experience’ in ordinary discourse do not invoke mental states or episodes. The philosophical problems only arise when an extraneously motivated mentalistic interpretation is placed on the ordinary talk. Unnoticed shifts from intelligible ordinary uses of the word to very different technical philosophical uses would obscure intelligibility issues and provide the proponents of the conception of phenomenal consciousness with the unwarranted impression that they are intelligibly talking about a perfectly familiar phenomenon. Our corpus study documents an event-sense that can be easily extended to mental events and then be subject to a mentalistic interpretation by philosophers with a pertinent extraneous motivation. Present findings may hence help explain why philosophically problematic concepts have struck many philosophers as so familiar

that they felt these concepts just have to make good sense. While primarily intended as a contribution to constructive ordinary language philosophy (in the wake of Austin, 1957), the present study may therefore also contribute to critical ordinary language philosophy (in the wake of Austin, 1962), and help explain and explode an illusion of sense.

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Declarations

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