**Concepts, Conceptual Analysis and Research Design**

**1. A puzzle**

We begin with a puzzle.

1. All research design comes with logically prior conceptual presuppositions about the nature of the thing(s) being investigated.
2. How can we tell whether our conceptual presuppositions are appropriate or not?
3. The answer to that question cannot be some kind of empirical investigation because any such investigation would require a research design and therefore come with its own conceptual presuppositions, which would simply raise the original question, about how we could know whether our conceptual presuppositions are appropriate, all over again. As that problem would recur with further attempts to employ empirical investigations to resolve the question, it is known as an ***infinite regress***, and is to be avoided at all costs.

Many researchers seem oblivious to the fact that there is *any* kind of investigation other than an empirical one, and those who do realise that empirical investigation is not all that we have available to us, assume that the alternative is a *theoretical investigation*, but that kind of thing wouldn’t help us here either because theoretical investigations also come with conceptual presuppositions.

**2. What are conceptual presuppositions?**

Imagine two researchers want to study *the nature of* intention (or some other psychological attribute). Researcher A designs some research that involves an fMRI scanner to look at certain activity in the brain while different people perform different tasks (the details don’t matter for our purposes here). Researcher B designs some research that involves considering the things some people say and do in specific circumstances (again, the details don’t matter for our purposes here). To see that there are conceptual presuppositions in both cases, and that they are *different*, consider what each researcher is logically committed to as a result of their chosen research design.

Researcher A, if genuinely trying to investigate *the nature of* *intention*, is committed to the idea that intentions are the kind of thing that are to be found in the brain, and researcher B is committed to the idea that intentions are the kind of thing that are to be found in the things people do and say, considered in the context in which they do and say them. It would be illogical for researcher A to go looking at brains if he or she thought intentions aren’t the kind of thing to be found in the brain, and it would be equally illogical for researcher B to look at the things people do and say and the contexts in which they do and say them if he or she thought intentions aren’t the kind of thing to be found in the things people do and say and the contexts in which they do and say them.[[1]](#footnote-1)

Those, however, are not the only conceptual presuppositions that come with the research designed by A and B. There are various logical consequences of thinking that intentions are in the brain, so researcher A may be committed to the thought that intentions might be manipulable (in a reliable and predictable way) by certain types of intervention, that intentions are brain states, that psychology (or at least the psychology of intention) is ultimately reducible to neuroscience, that free will may be more limited than we tend to think, or even that it is a fiction, or that any suitable theories of intention must involve an account of the functioning of the brain.

The logical consequences of the research design adopted by researcher A extend further than that. The concept of intention is related to other concepts, for example that of deciding (if I intend to do something, I have decided to do it, and, if I didn’t intend to do something, I didn’t decide to do it). That’s important because it means that researcher As conception of deciding is constrained by his or her conception of intention, so by designing the research in a way that brings logically prior commitments in relation to intention, researcher A has also, in designing the research that way, become logically committed to opposition to a whole range of views of deciding, and constrains researcher A to choosing from a much smaller set of options in relation to his or her conception of deciding. For example, researcher A may be committed to *something like* the idea that it is the brain that decides, not the person (roughly a view brought to prominence by the research of Benjamin Libet[[2]](#footnote-2)). As deciding isn’t the only concept related to that of intention, the logically prior commitments don’t end there, but further description of those commitments isn’t necessary for our purposes here.[[3]](#footnote-3)

It is important to recognise that while this may leave researcher A free to choose between some *specific* accounts of intention and decision-making (because they fall within the set of positions to which he or she is logically committed by the design of the research), the fact that a great many other positions are ruled out is not a matter of choice for the researcher, but rather those positions are ruled out on *logical* grounds; it would be logically inconsistent to adopt any of the positions that are ruled out because they are inconsistent with the conception of intention (or any related concepts) found in the presuppositions of the research design.

**3. Why does the puzzle matter?**

The implications of failing to grasp the *issues* raised by the puzzle (the puzzle is just one way of presenting the issues, and so isn’t important *in and of itself*) are straightforward – poor research design.

Frequently, conceptual truths are confused with empirical truths, yet the two are quite distinct. Bennett and Hacker (2008: 239) clarify the difference when they point out that:

[T]he distinction between conceptual and empirical truth *is* not an epistemological, but a logical, one. A conceptual proposition ascribes internal properties or relations, whereas and empirical proposition ascribes external ones. A conceptual truth is partly constitutive of the meanings of its constituent expressions, whereas an empirical proposition is a description of how things stand. Precisely because such statements are partly constitutive of the meanings of their constituent expressions, failure to acknowledge a conceptual truth (e.g. that red is darker than pink) is a *criterion* of lack of understanding of one or another of its constituent expressions.

True empirical propositions state what *happens* to be the case, whereas true conceptual propositions state what *has to be* the case. Red is not darker than pink because every case of something being red that has ever been found has proved to be a case of that thing being darker than anything ever found that was pink. ‘Red is darker than pink’ is not a true empirical proposition, but rather it is a true conceptual proposition. Red is darker than pink because being darker than pink is partly constitutive of the meaning of the word ‘red’, and being lighter than red is partly constitutive of the meaning of the word ‘pink’. *Nothing* could be red without being darker than pink unless we are using the words ‘red’ and/or ‘pink’, or the expression ‘is darker than’ in some unusual way, but if we are, then what we say when we say that red is not darker than pink (while using ‘red’, ‘pink’ and/or ‘is darker than’ in an unusual way) is not to deny that red is darker than pink when we are using the words ‘red’ and ‘pink’, and the expression ‘is darker than’ in the correct way, and it may even be to say nothing meaningful at all (i.e. be nonsense). So someone who says that red is darker than pink meets a criterion for failing to understand at least one of the words ‘red’ or ‘pink’, or meets a criterion for failing to understand the expression ‘is darker than’.

Inventing new uses of words (symbols) for which there are already standard everyday uses does not result in new discoveries. So when some people started talking about machines (computers) ‘thinking’, that neither made possible, nor was it the result of, some new discovery; it was simply to invent a new use for the word ‘thinking’. It does not mean that when we talk of a computer ‘thinking’ what we say of the machine is what we say of a person when we say that he or she is thinking. It’s easy to be confused by such things because in cases of this kind we are employing homonyms (we use the same word in both cases – it has the same spelling and the same pronunciation – but it has a different meaning in each case).

What happens in cases where a conceptual question is confused with a scientific one? It will appear that scientific experimentation and theorizing *should* be able to answer the question, but they will continually fail to do so. In such cases it appears that we are facing a very difficult problem, when in reality we are adopting an inappropriate approach to trying to answer the question. Bennett and Hacker (2003: 2) describe the potential pitfalls when they point out that:

When empirical problems are addressed without adequate conceptual clarity, misconceived questions are bound to be raised, and misdirected research is likely to ensue. For any unclarity regarding the relevant concepts will be reflected in corresponding unclarity in the questions, and hence in the design of experiments intended to answer them. And any incoherence in the grasp of the relevant conceptual structure is likely to be manifest in incoherences in the interpretation of the results of experiments.

So confusion over what is a conceptual matter and what is an empirical matter is likely to lead to:

1. Inappropriate methods being employed and a resulting failure to answer the question with which we are concerned.
2. Poorly formed questions being posed.
3. Poor research design resulting in ill-conceived or misdirected research.
4. Misinterpretation of data (failure to interpret the results correctly).

What this shows is that there is not only a connection between conceptual presuppositions in research design and research questions, but also between both of those things and the nature of the claims to knowledge that can be made on the basis of the research in question. Before it is even possible to consider whether some claim to knowledge is true or false, it is first necessary to ensure that it, and the research questions from which it arises, *makes sense* (i.e. has a sense, or is meaningful, as opposed to having no sense or being, in the strict sense of the word ‘nonsense’). Again, Bennett and Hacker (2003: 2) alert us to the issues:

Conceptual questions antecede matters of truth and falsehood. They are questions concerning our *forms of representation*, not questions concerning the truth or falsehood of empirical statements. These forms are presupposed by true (*and* false) scientific statements and by correct (*and* incorrect) scientific theories. They determine not what is empirically true or false, but rather what does and what does not make sense. Hence conceptual questions are not amenable to scientific investigation and experimentation or to scientific theorizing. For the concepts and conceptual relationships in question are *presupposed* by any such investigations and theorizings.

Recognising that conceptual investigations are quite distinct from empirical investigations, and that theoretical investigations are something else again, is important, but if we are to get anywhere with the puzzle it will be necessary to have a good understanding of what we mean when we talk about concepts.

**4. What are concepts?**

It is easy to see this question as asking about the nature of some kind of entity, but that would be mistaken. As Bennett and Hacker (2008: 127) stress, ‘[c]oncepts are not kinds of entity’, rather,

[a] concept is something that can be applied or misapplied, introduced by a definition or explanation, that can be substituted for another, extended in various ways, can be grasped, understood or misunderstood, shared with others, mastered or possessed.

To possess a concept is to have a certain skill. It is, above all, to have mastered the use of a symbol. The criteria for whether a person possesses a concept are behavioural. They include the person’s correct use of a symbol (word, phrase or iconic symbol) that expresses the concept, and the appropriateness of the person’s behaviour in response to the use by others of symbols that express the concept. Concepts are not kinds of entity. To have grasped the meaning of the noun ‘W’[[4]](#footnote-4), to have mastered its use, implies that one has acquired the concept of a W. But the concept of a W is no more *correlated* with the word ‘W’ or cognate phrase than is the meaning of the word ‘W’. For neither meanings of words (i.e. their uses) nor concepts are kinds of entities that might be *correlated* with a word, any more than values are kinds of things that might be *correlated* with coins. Words are no more ‘representations’ of concepts than coins are representations of their values.

It will be helpful in explaining what concepts are to get clear about three misconceptions about the nature of concepts: (i) concepts are *not* categories, although concept possession is an important part of having the ability to categorise; (ii) concepts are *not* ideas or thoughts in the mind of a person when that person uses a word; (iii) *words are not concepts*, although we use words to refer to concepts. We use the word ‘person’, which is a linguistic entity – a collection of letters on a page, screen etc., or a noise uttered by a speaker – to express the concept *person*, as well as to refer to the word ‘person’, but the word and the concept are not the same thing. The first and third of those possible misconceptions should become clearer when more has been said about the nature of concepts, but the notion that concepts are ideas or thoughts in the mind of a speaker requires further discussion.

Best (1978: 13) rightly emphasises that a concept could not be a ‘non-linguistic idea or thought … in the mind of a speaker which endows a word with meaning.’ If such a thing were the case, we couldn’t know what the concept meant because we would have no relevant access to the mind of the speaker to enable us to determine that to which the word used corresponded. As a consequence, we could not know whether the speaker associated the same idea with the word as we did.

Best (1978: 13) concludes that ‘[a]s this would apply equally to everyone else, no one could possibly know what anyone else meant by his use of words, hence there could be no communication, and the notion of language would be unintelligible’. He also points out that anyone who thinks that concepts are non-linguistic thoughts or ideas in the minds of speakers cannot even refer to ‘words’ because for something to be a word, rather than a mark or sound that lacks any intelligibility, it must be ‘an interdependent part of an objective, public language’. This means that if the theory that concepts are non-linguistic thoughts or ideas in the minds of speakers were correct, then it would be impossible for anyone to state the thesis. The fact that it *is* possible to state the thesis shows that it couldn’t be correct. Such a position (the view that concepts are non-linguistic thoughts or ideas) is, of course, incoherent, as it entails a presupposition of the very thing that the theory seeks to deny, namely, that words must have objective meanings as a consequence of being part of a public language.

To explain the notion of a concept, Best (1978: 13-14) compares it to the notion of *meaning*. He points out that to know the meaning of the word is (at least much of the time) to know how to use the word correctly in various circumstances. Grasping the relevant concept, however, requires one to have an understanding of the ***logical consequences*** of use of the word, and **the relationship between that concept and other concepts**. Best (1978: 13-14) gives the example of the concept *bachelor*. One could not be said to know the meaning of the word ‘bachelor’ if one did not know that a bachelor cannot be married, yet one might be thought to know the meaning of the word if one did not realise that it is not possible for a bachelor to have legitimate children.[[5]](#footnote-5) This illustrates the notion of logical consequence in that a logical consequence of the standard use of ‘bachelor’ is that a bachelor cannot have legitimate children. That logical consequence is, therefore, a feature of the concept *bachelor*.

The distinction between knowing the meaning of a word and having a grasp of the relevant concept is a matter of the degree to which one has an understanding of the logical consequences of the use of the word (implications of use) and its relation to other words. One could not be said to know the meaning of a word if one did not have *some* knowledge of those things, but to be said to grasp the concept requires a more extensive understanding of them. Best (1978: 14) stresses that:

the fact that a sharp distinction cannot be drawn between meaning and concept does not in the least vitiate its usefulness, since it would be absurd to suggest that in order to know the meaning of the word it is necessary to have a thorough grasp of its logical consequences. Nevertheless, the meaning of a word cannot … be intelligibly considered in isolation, but only in relation to a whole set of logically interdependent terms which partly constitute a language.

As ***having a grasp of the concept requires a detailed understanding of the logical implications or consequences of the use of a term, and the relationship between that term and other terms***, some things follow from that, which might strike some as counterintuitive. For example, Best (1978: 12-13) points out that it is quite possible for someone who has no practical expertise in an area to have a far better grasp of the *concept* of the relevant activity than someone who is an expert in performing that activity. Put simply, ‘it is quite possible to be able to swim without having any understanding of the concept of swimming, and conversely to understand the concept of swimming without being able to swim’ (Best, 1978: 60). A seal or a fish can swim far better than a human being, yet has no grasp of the concept swimming, nor could a seal or a fish ‘manifest conceptual ability or inability’ (Best, 1978: 61). The important thing to see here is that in cases where there is no clear impediment to a thorough grasp of the concept (Best gives the trivial example of the concept swimming for the purpose of clarity, but is aware of the triviality of that example), there is no reason why someone with an expert practical ability in, say, dance or gymnastics (two more substantial examples given by Best), should be any better equipped to grasp the relevant *concepts*.

**5. Two related elements of a method to address the puzzle**

To resolve the difficulty presented by the puzzle we need to have a method of investigating any given concept that does not involve empirical investigation and does not rely on theoretical commitments of one kind or another. Recall that possession of a concept requires i. understanding of the logical consequences of the use of a term, and ii. an understanding of the relationship between that term and other terms that have a logical relation to it. That means that concept possession requires two inter-related abilities. As a consequence, we have a method of investigating concepts, to establish whether the conceptual commitments that come with a given research design are appropriate, that has two inter-related elements. ***Conceptual elucidation*** explores the logical consequences of the use of a term, and ***connective analysis*** considers the relationship between the term in question and other logically related terms. The two enterprises cannot be consistently kept separate, and so are probably best thought of as two elements of one method (which we might call ‘***conceptual investigation***’), rather than two distinct methods.

**Conceptual elucidation**

Given the earlier discussion of the relationship between the meaning of a word and the concept or concepts expressed by that word, it should come as no surprise that conceptual investigation is not exactly the same thing as an investigation of the meaning of a word. Best (1978: 14) illustrates this when he says that:

a *conceptual* inquiry is concerned to trace out some of those logical interdependencies in ways which are not normally required for knowledge of the meaning of a term, therefore it involves an examination of a whole cluster of related terms. Thus, for example, to examine the *concept* of freedom will inevitably include a consideration of related concepts such as causation, knowledge, responsibility and perhaps God. For it will be necessary to ask such questions as: If an action has been causally determined can it have been performed freely?; To what extent is lack of knowledge a limitation on one’s freedom to act?; Is one responsible for an action only when it was freely performed?; If God be all-powerful, can people be free? It would not, of course, be necessary to have considered such questions carefully in order to be said to know the meaning of ‘freedom’ and its cognates.

It is not, therefore, the case that there is a concept for *every* word, nor, indeed, that a word can only express one concept. What determines whether a word *expresses* a concept is whether there are significant logical consequences to the use of the word, and important relations to the uses of other words in the sense that those relations raise conceptual questions or can contribute to puzzlement or confusion.

Best (1978: 69) draws attention to a particular feature of conceptual matters when he points out that to deny that a sunset can be heard is to fail to address the issue of concern we should have, from a conceptual point of view, with the claim that it could be heard. This is because the fact that a sunset cannot be heard is not the result of the limited auditory powers of human beings, and does not follow from the fact that no human being has in fact heard a sunset. Rather, sunsets are just not the kind of thing that could be heard, or, to put it another way, sonic concepts cannot *meaningfully* be predicated of sunsets, and auditory concepts cannot *meaningfully* be predicated of human beings experiencing sunsets. This is true even of those who claim to hear colours etc., because synaesthesia does not entail different auditory or other sensory capacities, but rather associations between sensory capacities. So the person who hears colours does not do so in the sense that for them colours emit sounds, or sounds are coloured, rather, such people hear sounds and see colours just like everyone else, but when they hear sounds, they *associate* those sounds with colours in a regular way. So synaesthesia is not a matter of different sensory capacities, but rather a capacity for making regular associations, and as such it does not in any way disrupt, or worse, ‘disprove’ the logical connections and implications exemplified in the (*conceptual*) observation that one cannot hear a sunset.

So conceptual elucidation requires us to ask about what follows (and also what does not follow) of calling something an *x*, where ‘*x*’ is whatever word we use to express the concept in question. For example, when we say of a person that he or she thinks something, it follows that the person in question could come to doubt it, could seek reassurance by looking for evidence or corroboration, could change his or her mind, that what the person thinks is something that someone else could, in principle, also think (or could deny). It also follows in, certain contexts, that the person does not *know* the thing in question, but rather *believes* it to be the case. We could go on charting the things that do and do not logically follow of saying of someone that he or she *thinks* something. Those observations are then very useful when faced with cases such as the claim that a computer can think, or when considering what it makes sense to say of the capacity of animals for thought (a dog can expect its owner to come home soon, but it can’t expect her to come home at 6:05 pm a week next Tuesday!).

Notice, however, that in attempting to elucidate the concept of *thinking* it very quickly became necessary to invoke connections with other concepts, such as doubt, evidence, knowledge, belief etc. it is for that reason that the two ‘methods’ (conceptual elucidation and connective analysis) are perhaps better thought of as two elements of a single method.

**Connective analysis**

Hacker (2013: 449) gives a very general description of the kind of investigation required here when he observes that:

[m]astery of the use of a word is exhibited in using it correctly, in giving an appropriate contextual explanation of what one means by it in an utterance and in explaining what it means in the context of the utterances of others that one understands – for these manifestations of linguistic competence are severally criteria of understanding. But to have mastered the use of a word does not mean that one can give a synoptic description of its use, any more than it means that one can give an analytic definition of the word. Nor does it mean that one can give a *comparative analysis* – describing its kinship and differences with related expressions in the same conceptual field. But it is precisely this that we need when we lose our way. We need a map of the conceptual landscape that will show us how to find our way around. We need to call to mind the familiar uses of the words that lie at the heart of our confusions and unclarities, to plot their complex logical relationships, and to note their position in their grammatical environment.

Peter Strawson (1992: 19) offers us a description of one form that the analysis of concepts can take[[6]](#footnote-6) when he describes what he calls ‘connective analysis’ as follows:

Let us imagine … the model of an elaborate network, a system, of connected items, concepts, such that the function of each item, each concept, could, from a philosophical point of view, be properly understood only by grasping its connections with the others, its place in the system – perhaps better still, the picture of interlocking systems of such a kind.

Peter Hacker has developed this conception of philosophical inquiry and employed it in a great many detailed conceptual analyses of different regions of our conceptual scheme. The goal of philosophy on such a conception is ultimately to provide a contribution to our understanding, rather than a contribution to knowledge (see Hacker, 2013b: 3-28). To help in achieving that end, connective analysis, seeks an overview of the relevant terrain. Such an overview is often said to be ‘surveyable’, or sometimes thought to constitute a ‘perspicuous representation’ of the relevant terrain.

Hacker (2013: 438) distinguishes between connective analysis pursued in the *linguistic mode*, where the focus is on the *linguistic* terrain, and the aim is to provide ‘an overview of segments of our language that, in one way or another give rise to conceptual problems’ (Hacker, 2013b: 12), and connective analysis in the *conceptual mode*. Connective analysis conducted in the conceptual mode focuses on our *concepts* and seeks to provide ‘an overview of the structure of (parts of) our conceptual scheme and of logico-grammatical relations between its elements’ (Hacker, 2013b: 12).

The difference between the two modes of connective analysis becomes apparent in how one goes about employing them – in what one takes as one’s focus. As a consequence, the two modes of inquiry can often overlap. As Hacker (2013: 438) stresses, the two modes of connective analysis are:

… for the most part, equivalent. Connective analysis in the linguistic mode clarifies problematic concept by locating *the word or phrase that expresses it* as a node in the web of words, describing its pertinent grammatical features and its logico-grammatical connections with related expressions in the network, as well as its differences from those with which it is liable to be confounded. Or, *presupposing the relevant grammar*, connective analysis in the conceptual mode may locate the concept in the network of concepts, and describe its conceptual and logical connections with related concepts, as well as its differences.

In this regard, it is important to emphasise that on this conception philosophy is not, in general, *about* language, and has an interest in language only insofar as consideration of such matters assists in dealing with conceptual confusion. However, Hacker (2013b: 12) also stresses that ‘does not make concepts the special subject matter of philosophy’. Our goal is to dissolve philosophical puzzlement when it arises, and in that sense we might say that philosophy doesn’t *study* anything *per se*, and that observation is connected to the idea that philosophy is a contribution to understanding, not to knowledge (Hacker, 2013b: 3-28).

If we take the concept of *truth* as an example, the beginnings of a connective analysis might be as follows:



Having mapped some of the major concepts connected to the concept of *truth* (there are others), it is then possible to develop a more sophisticated grasp of the concept of *truth* by asking about the logical consequences of calling something true, false, doubt, evidence, etc., while also exploring the connections between the different logical consequences of each of the nodes (concepts, or, if working in the linguistic mode, words) in the network.

**6. Technical concepts, everyday concepts and disciplinary differences**

There are various ways we might differentiate *types* of concept, but for our purposes one important distinction is that between *technical concepts* and *everyday concepts*. Technical concepts generally have one meaning and can be defined in terms of necessary and conjointly sufficient conditions (conditions that have to be met, and, if they are all met, are sufficient for the concept to apply). For example, the concept *specific gravity* is the ratio of the density of a substance to the density of a reference substance. In the case of specific gravity the reference substance is generally water, whereas the term ‘relative density’ is often preferred because it is a related concept in which the reference substance could be something other than water. Specific gravity can also be defined in terms of the ratio of the mass of a given substance to the mass of a reference substance for the same volume, but that is not to say that specific gravity is two things, but two ways of saying what it is.

Compare such technical concepts with everyday concepts such as the concept of *thinking*. What might I have been doing if I was thinking about philosophy last night? I might have been, as it were, talking silently to myself, I might have been talking out loud about philosophy, either to someone else, or to no one (I might have been preparing a lecture and just addressing the wall). If I was talking to someone else I might have been explaining something, or discussing something. Alternatively, someone might have been explaining something to me. I might have been listening to a lecture, watching a film on YouTube, reading a book, writing a paper or a lecture, taking notes, making a mind map, or any combination of those and various other things. We wouldn’t get very far trying to identify necessary and conjointly sufficient conditions for thinking because it is what is referred to as a ***family resemblance concept***. In other words, there are various features to thinking, and specific instances of thinking do not have to have any one of those features in common, but rather, like members of a family, some share certain features and others share different features (some have the family nose, others the hair colour characteristic of many members of the family). There are various things that could count as thinking about philosophy last night, but no one thing, or specific combination of things, that can be thought the essence of the concept (there is no set of conditions that if met would mean we definitely had a case of thinking about philosophy last night, and would guarantee that things could not be otherwise).

A common misconception is the thought that if an academic discipline stipulates tight criteria for an everyday concept it somehow turns that into a technical concept and therefore permits rigour that was hitherto absent. There are probably many things wrong with that thought, but we’ll focus on two.

First, technical concepts are *not*, as is frequently thought, more precise than everyday concepts because precision is relative to the context of use, and our use of everyday terms is perfectly clear if we grasp the context of use. The notion of further, or greater, precision than *that* makes no sense. As Wittgenstein pointed out, using a razor to cut bread isn’t better than using a knife because of its potential for precision.

Second, it fails to recognise that if a research question is about the everyday concept, then rendering it a technical concept and doing research to address a question about *that* is to address a *different question*. The resulting claim to knowledge is not what it appears. If we ask a question about, say, memory, it is no use whatsoever, as far as addressing that question is concerned, to stipulate a technical definition of a much narrower concept called ‘*memory*’ on the grounds that it is something that can be measured. It’s no use measuring concept B when we asked a question about concept A; that isn’t to address *our* question *at all*. Worse, because we call concept A ‘memory’ and we call concept B ‘memory’, it will look like we have addressed the question, which will result in all sorts of confused and erroneous claims being passed off as knowledge based on solid research.

That does not mean that the research employing the narrower concept is pointless, but it is to say that it isn’t research addressing the original question, but it best thought of as addressing some other question about whatever falls under the new narrower concept, so there are implications here for what the researchers think they are investigating and what claims to knowledge they think they can make on the basis of the research.

That point is related to disciplinary differences in relation to what appears to be the same concept. Put simply, different disciplines think about things from different perspectives, and as a result they have different uses of the same term. The different uses come with different logical consequences to the use of the word and have different connections to other words or to other concepts. That is just a long way of saying that different disciplines frequently have different concepts expressed by the same word. What is particularly important in relation to that point is not that different disciplines use the same word differently, but that they employ different concepts, because that has implications for the reasoning in each discipline, the meaning of the research questions, what would be required to answer those questions, and what kinds of claims to knowledge would be appropriate or even possible.

**7. Occasion-sensitivity**

A final qualification is necessary. Concepts have been discussed here, as they usually are, in general terms. However, understanding is an occasion-sensitive matter, so what a word or sentence means depends on the context in which it is uttered or written, which is to say that it matters which kind of human interaction it is employed in – who uses it, in communication with whom, for what purpose, what will follow of using it in those circumstances, what happened before it was used, what was the relevant state of things in the room or surrounding environment at the time, and so on. That not only makes a difference to how we understand the words uttered or written, but also to what we take the relevant concepts to be on that occasion of utterance or writing. Whether what is uttered or written on a given occasion should be understood as *x* or as *y* is likely to have implications for whether we are dealing with concept X or concept Y.

**References**

Baker, G. P. (2004) *Wittgenstein’s Method: Neglected Aspects*, Oxford: Blackwell.

Bennett, M. R. and Hacker, P. M. S. (2003) *Philosophical Foundations of Neuroscience*, Oxford: Blackwell.

Bennett, M. R. and Hacker, P. M. S. (2008) *History of Cognitive Neuroscience*, Oxford: Wiley-Blackwell.

Best, D. (1978) *Philosophy and Human Movement*, London: George Allen & Unwin.

Hacker, P. M. S. (2007) *Human Nature: The Categorial Framework*, Oxford: Blackwell.

Hacker, P. M. S. (2013) *The Intellectual Powers: A Study of Human Nature*, Oxford: Wiley-Blackwell.

Hacker, P. M. S. (2013b) *Wittgenstein: Comparisons & Context*, Oxford: Oxford University Press.

Libet, B. (1985) ‘Unconscious cerebral initiative and the role of conscious will in voluntary action’, *Behavioural and Brain Sciences*, **8**, 529-66.

Strawson, P. F. (1992) *Analysis and Metaphysics*, Oxford: Oxford University Press.

Wittgenstein, L. (2009) *Philosophical Investigations*, fourth revised edition, edited by P. M. S. Hacker and J. Schulte, trans. G. E. M. Anscombe, P. M. S. Hacker and J. Schulte, Oxford: Wiley-Blackwell [**cited as *PI***].

1. Note that those are logical consequences of the respective research designs *if, and only if*, the research questions to be addressed are concerned with *the nature of intention* (what intention *is*), and not, for example, if researcher A is concerned with the role of the brain (say, the nature of the electrochemical activity in the brain) in cases that we would describe in our ordinary folk psychology terms as someone *intending* to do some specified thing. Likewise, if researcher B is concerned with what people do and say in certain circumstances when those cases are ones where we would say someone intended to do some specified thing. As a consequence, thinking about the conceptual presuppositions of research design is related to the issue of clarity in one’s research questions. [↑](#footnote-ref-1)
2. Libet, B. (1985) ‘Unconscious cerebral initiative and the role of conscious will in voluntary action’, *Behavioural and Brain Sciences*, **8**, 529-66. [↑](#footnote-ref-2)
3. The discussion here has been elaborated by considering *some* of the conceptual presuppositions and commitments of researcher A, but researcher B would also have a *different* set of such presuppositions and logical commitments. [↑](#footnote-ref-3)
4. ‘W’ here is just being used as a place-holder for any noun. [↑](#footnote-ref-4)
5. Best’s example is more than a little dated, but it does illustrate logical consequence. [↑](#footnote-ref-5)
6. Baker (2004: 52) describes Strawson’s approach as providing an ‘account of the most general features of our conceptual scheme’. [↑](#footnote-ref-6)