## 1 Transcendental Epistemology Introduced

This Element is entitled *Transcendental Epistemology*, but the main bulk of it is on the so-called transcendental argument. This implies a philosophical outlook that the author is recommending, but it is a controversial one, just like other outlooks in philosophy. In order to find this narrative intelligible, some stage settings are required.

First of all, what is epistemology? Etymology aside, in general it refers to the part of philosophy that is about the study of how we *know* things, or the theory of knowledge, especially with regard to its methods, validity, and scope, and to the distinction between *justified* belief and opinion. If one looks into various branches of epistemology, one would presumably discover two groups, as follows:

Group 1: Approaches – virtue epistemology; formal epistemology; scientific epistemology.

Group 2: Domains – moral epistemology; modal epistemology; social epistemology; epistemology of science.

The list is far from exhaustive, but it is enough to illustrate the crucial point that can help us understand what transcendental epistemology is. To begin with, branches of epistemology can be about specific *approaches* to standard questions in epistemology. For example, virtue epistemology aims to solve standard questions with certain notions of *virtue* (Sosa 2007); formal epistemology seeks to tackle standard questions with *formal* methods from mathematics and logic (Bradley 2015),; and scientific epistemology attempts to approach standard questions with *scientifically* informed methods (Kornblith 2021). By contrast, other branches of epistemology can be about specific *domains* in epistemology. For example, moral epistemology discusses how we know about *moral* truths, if there are any (Zimmerman 2010). Modal epistemology studies how we know about *modal* truths, if there are any (Mallozzi, Vaidya, and Wallner 2021). Epistemology of science is also a branch of philosophy of science, asking how we go about gaining *scientific* knowledge (Bird 2010). This contrast, to be sure, is not completely sharp, but it is a rough-and-ready one that helps us understand what a branch of epistemology is about when we encounter a new label. Now what about *transcendental epistemology*? Is it an approach or a domain? Interestingly, it seems to be both. When one invokes transcendental arguments or methods (to be defined) to support certain conclusions, the emphasis is more on the *approach*, while when we focus on a specific kind of 'how-possible' question, the emphasis is more on the *domain*. We will focus on the domain reading here, as it is more controversial given Cassam's (2007)

criticisms. As for the approach reading, it is actually quite straightforward: one can invoke transcendental arguments to support conclusions in ethics, metaphysics, philosophy of perception, and so on. Whether such arguments are effective, to be sure, is a matter that needs to be dealt with in a case-by-case manner, in addition to the general considerations we will examine.

'Transcendental epistemology' is a rare label; it is almost non-existent compared to 'virtue epistemology' or 'modal epistemology'. What is transcendental epistemology, exactly? According to its most prominent contemporary advocate, Quassim Cassam: 'Transcendental epistemology is, among other things, an inquiry into the conditions of human knowledge. The conditions which are the focus of transcendental epistemology are *transcendentally necessary* conditions, that is, necessary conditions which "reflect the structure of the human cognitive apparatus"' (Cassam 2003: 181, referring to Allison 1983; see also Cassam 1998).

Later, I will argue that the characterisation here is good though incomplete, but for ease of exposition, let's stick to it for now.[1] Later in his seminal work *The Possibility of Knowledge*, Cassam (2007) investigates a specific kind of 'how-possible' question, and proposes his own 'multi-levels response' to such questions. This is a prime example of transcendental epistemology. We will have a brief look at Cassam's framework in Sections 1.1 and 1.2, and introduce our alternative later. But before that, at the very beginning of this Element, I shall provide a more general background to motivate this investigation. After all, the very facts that 'transcendental epistemology' is a rare label and (relatedly) that 'transcendental arguments' are often relegated to a corner of history might indicate that most of us should not bother with them. Let me briefly counter this impression here. Parts of what I am now going to say will be slightly repetitive with some later content, but in order to motivate this investigation for the general audience, some anticipations are called for.[2]

The first obvious thing here is that many big names have been said to invoke such arguments, including Aristotle, Descartes, Kant, Fichte, Hegel, Wittgenstein, Davidson, Strawson, Putnam, Evans, Korsgaard, McDowell, and so on. Isn't this enough to show we should care? Perhaps not, one might contend: what if one works on a kind of philosophy which is simply *not* relevant to these names? Or what if one works on Aristotle but simply does not touch on the relevant bit, that is, the alleged transcendental argument for non-contradiction? It seems that this first reason by itself is not strong enough.

[1] To anticipate, it will be argued that the conditions not only reflect the structure of human cognitive apparatus, but also *possibilitate* the target phenomenon.
[2] The editor and one reviewer of this Element have emphasised the importance of stage setting here.

Another reason is not only that many big names have been said to invoke such arguments, but also that many central topics unavoidably involve transcendental reasonings. For example, issues concerning values, free will, scepticism, semantic meanings, objectivity, time, to name just a few, have bearings with such arguments. Of course, it is always possible to work on those areas without worrying about transcendental arguments, but if they are ubiquitous, it becomes arbitrary or even intellectually irresponsible to ignore them.

Now, the above two reasons, even if good, are about transcendental *arguments*. What about transcendental *epistemology*, or more broadly, transcendental *philosophy*? Isn't it the case that one can work on ethics, metaphysics, or epistemology without touching on this Kantian branch? To satisfactorily answer this challenge will take us to Section 1.1 and beyond, since the key here is that transcendental philosophy centres on a kind of how-possible question, which will be explained in the following sections. For now, we need to only focus on this point: many fundamental questions in philosophy are about the *nature* of things. For example, What is goodness? What is free will? What is knowledge? Upon reflection, these kinds of questions presuppose corresponding transcendental questions, which are about the *possibility* of those things:

1. 'What is goodness?' To answer this, we need to confront a conceptually prior question, 'how is goodness possible, given that individual creatures are selfish?'.
2. 'What is free will?' To answer this, we need to confront a conceptually prior question, 'how is free will possible, given determinism or quantum mechanics?'.
3. 'What is knowledge?' To answer this, we need to confront a conceptually prior question, 'how is knowledge possible, given evil demon or dream scepticism?'.

To fully appreciate the significance of this third reason, we need to look into the subject matter discussed in the follow sections. The main message of this introductory section is that transcendental arguments, transcendental epistemology (both as an approach and as a domain), and transcendental philosophy are *not* parochial or obsolete areas of philosophy. Rather, they occupy central parts of philosophy in the past, the present, and the future.

## 1.1 Epistemological How-Possible Questions

Not all how-possible questions are philosophically interesting. In sports, we ask how it is possible for certain players to achieve certain levels of performance. In such circumstances, we ask such questions because we feel that those

performances are incredible, but there is nothing *logically*, *metaphysically*, or even *physically* impossible about them. However incredible they are, such performances do not violate physical laws. Philosophically interesting how-possible questions are *not* like that. Here is how Cassam introduces the subject matter: 'How-possible questions matter in philosophy because, as Nozick points out, "many philosophical problems are ones of understanding how something is or can be possible" ([Nozick]1981: 8) ... how-possible questions are *obstacle-dependent* questions. We ask how x is possible when there appears to be an obstacle to the existence of x' (Cassam 2007: 1–2).

The idea is this: how-possible questions in philosophy make sense when we ask how *x* is possible *given* certain views we hold true. For example, how is freedom of the will possible, *given* determinism? One can of course reject determinism, but the challenge can be refined: how is freedom of the will possible, *given* that the world is either deterministic or indeterministic, but neither of them seems to fit our idea of freedom? Cassam points out that there are two basic strategies: 'The first is to deny the existence of the obstacle which gave rise to the question. This is an *obstacle-dissipating* strategy ... [other ways] are *obstacle-overcoming* rather than obstacle-dissipating strategies since they don't straightforwardly deny the existence of the obstacle ... What they deny is that the alleged obstacles are insuperable and, in this sense, genuine' (Cassam 2007: 2).

We will say more about this in Section 1.2. Now, there is actually a third strategy, that is, scepticism, which denies that the obstacles in question can either be dissipated or overcome. For our purposes, scepticism will be mostly in the background, but the existence of this option reminds us of the relevance of epistemology in asking philosophically significant how-possible questions.

How-possible questions in this sense can be said to define *transcendental philosophy*, but do not yet define *transcendental epistemology* as a domain. As Cassam (2007: 3) says, his 'concern is with epistemological rather than metaphysical, ethical, or theological how-possible questions'. So, for transcendental epistemology, the key questions are *epistemological* how-possible questions. Prominent topics include perceptual knowledge, knowledge of other minds, and a priori knowledge. In this Element, we will not focus on these questions per se. Rather, we will compare Cassam's multi-levels response and the traditional response based on transcendental arguments (in the rest of Section 1). We will next provide some historical overviews of transcendental arguments in the history of Western philosophy (Section 2), and propose a new way of putting transcendental arguments to work (Section 3). We will then use this new way to look at three examples of transcendental arguments in epistemology (Section 4) and, finally, discuss prominent questions concerning naturalisation, explanation, and

scepticism (Section 5). It is likely that readers will not find the hypothesis put forward in Section 3 convincing, but even if that hypothesis turns out to be false, this intellectual journey will still teach us much about transcendental epistemology, both as an approach and a domain, and the relevant parts of history of philosophy.

## 1.2 Cassam's Multi-Levels Response

Invoking transcendental arguments has been the traditional approach when tackling how-possible questions in the relevant sense, and that will be our main topic in the rest of this Element. Before going into these details, it is essential to look into a recent alternative in Cassam (2007), as indicated in the previous section. Cassam argues that his multi-levels response is superior to transcendental arguments. In this section we will discuss the gist of his alternative.

To begin with, note that, strictly speaking, the contrast between a multi-levels response and transcendental arguments is not exactly correct: obviously, if one side is 'multi-levels', the opposing side should be 'single-level'. That might indeed be one way of setting up the dialectic: as Cassam points out, some might think that transcendental arguments are themselves *sufficient* for responding to the relevant how-possible questions. However, Cassam thinks that is not the most sensible way of defending the role of transcendental arguments in this context, as we shall see. But to understand this, we need to have a basic grasp of Cassam's multi-levels response.

Cassam's characterisations of and arguments for his proposal are very rich and intricate; in what follows we only provide a sketch of them. Again, here is how he introduces the relevant kind of how-possible question: 'To ask a how-possible question is to ask how something which looks impossible given other things that one knows or believes is nevertheless possible' (Cassam 2007: 1, with a reference to Dray 1957).

Prominent examples in philosophy include 'How is freedom of the will possible, given determinism?' and 'How is evil possible, given certain views about God?'. From these examples, we can see that 'how-possible questions are *obstacle-dependent* questions' (Cassam 2007: 2; original italics). The relevant obstacles, or at least apparent obstacles, make it intelligible to ask those how-possible questions. What do we do about those obstacles? There are two main strategies:

Obstacles-dissipating strategy: to 'deny the existence of the obstacle' (Cassam 2007: 2).

Obstacle-overcoming strategy: to deny that 'the alleged obstacles are insuperable and, in this sense, genuine' (Cassam 2007: 2).

Now why is Cassam's proposal a 'multi-levels response'? Let's see what those levels are:

> Level 1, Means: The level at which means of knowing about a certain subject matter are identified.
>
> Level 2, Obstacle Removement: The level at which obstacles to the acquisition of knowledge by the proposed means are overcome or dissipated.
>
> Level 3, Enabling Conditions: The level at which enabling conditions for knowing by the proposed means are identified. (Cassam 2007: 9–10)

And there is a further contrast:

> Minimalism: One should stop at level 2.
> Moderate Anti-Minimalism: One *can* continue to level 3.
> Extreme Anti-Minimalism: One *should* continue to level 3. (Cassam 2007: 10 and sect. 1.4)

This is the general shape of Cassam's framework. In Cassam (2007) he interprets Kant as holding extreme anti-minimalism and argues against it. Cassam himself holds moderate anti-minimalism. For our purposes, we will focus on his discussions of level 3, as it is where he touches on transcendental arguments. First, we will describe how he understands this level, then we will evaluate his idea that transcendental arguments, though they look similar to this level, are nevertheless *irrelevant* when it comes to the kind of how-possible questions we care about. Finally, we will explain why, properly understood, transcendental arguments *can* still be regarded as useful in this context, contra Cassam. We will need to leave the latter two points until the end of Section 1.3.

How does Cassam understand level 3? To answer this question, we need to look into how he understands *enabling conditions*. Instead of giving a single definition, Cassam gives various characterisations in different contexts. When it comes to the possibility of perceptual knowledge, the relevant enabling conditions are 'the conditions under which it is possible for perception to be a source of knowledge of the things around us' (Cassam 2007: 9). From this we can see that the enabling conditions need to be coupled with specific means (e.g., perception in this case) as a source of the knowledge in question. However, in this description Cassam does not explicitly state what he means by 'enabling'. He does have much more to say about it though; consider this passage: 'What are enabling conditions? In essence, they are a sub-class of necessary conditions . . . [they] are necessary conditions for achieving something by a particular means. Relatedly, enabling conditions are *background* conditions, which may or may not be causal'(Cassam 2007: 17; original italics).

But what do we mean by 'background' here? Cassam invokes a common example to cash it out:

> Being an unmarried man is a necessary condition for being a bachelor but being an unmarried man isn't an enabling condition for being a bachelor. Intuitively, the reason is that being an unmarried man isn't a 'background condition' for being a bachelor. Being an unmarried man doesn't just 'enable' one to be a bachelor, it is what being a bachelor consists in. (Cassam 2007: 17)

The two passages just quoted generate lots of questions. I discuss some of them below:

1. Why are enabling conditions *necessary* conditions at all? Note that Cassam says that these conditions may or may not be *causal*. If they are non-causal, they might be a priori, so it is natural to expect that they are necessary. But in that case, how can they be necessary conditions for achieving something by a particular means? After all, 'achievement' in this context does sound causal. Now, if they are causal, it is at least controversial to hold that they are necessary, for Humean reasons. Cassam mentions that 'Dretske and Searle take it that enabling conditions are causally necessary conditions' (Cassam 2007: 17), so we know that they opt for a non-Humean picture, which is not a problem as such.[3]
2. In what sense are these conditions *enabling* ones? Presumably, being an unmarried man does not enable one to be a bachelor *at all*. More accurately, being an unmarried man *semantically entails* being a bachelor. Whether this fits Cassam's 'consists in' expression depends on how we understand that notion. This might be fine, but it also leads to our next point.
3. In what sense are these conditions *background* ones? Cassam's remark that being an unmarried man isn't a 'background condition' for being a bachelor gives us some clues by elimination. But without a more explicit characterisation of what background conditions are, we cannot know more about the positive picture.

In the remainder of this section, I will argue that Cassam's reliance on the notions, or at least the expressions of, 'enabling conditions' and 'background conditions' is misplaced, although this does not really threaten his positive proposal directly. To begin with, it is illuminating to see how terms such as 'enabling conditions' and 'background conditions' are used in the literature.

[3] Based on Mackie (1965), Cassam (personal communications) expresses concerns about my interpretation of the Humean picture here, but I shall not go into exegetic issues in this context. Also, he reminds that background conditions here might be related to John Searle's (1983) notion of 'background' in *Intentionality* (and Tyler Burge's (1996) discussion of entitlement to self-knowledge, but the relation is too vague to be stated precisely here).

In his comment on Daniel Dennett's (1978) overall picture, John McDowell (1994) invokes the distinction between *enabling* explanations and *constitutive* explanations. This corresponds to two other distinctions: the one between the subpersonal and the personal, and the one between cognitive sciences and philosophy. It is arguable that this mapping of the three distinctions is controversial (Hornsby 1981; Drayson 2012), but what we need here is not such a mapping. What should be taken seriously is the one between the enabling and the constitutive: while the former is about the *causal mechanisms* underpinning the relevant phenomenon, the latter is about the *nature* of such a phenomenon. Now, how does this compare to Cassam's usage? Recall that for him, enabling conditions may or may not be causal, but that seems to be too broad a notion in this context. Whether something is causally efficacious seems to be a feature that carves nature at its joints; of course, we can have a category which encompasses a causal and a non-causal variant, but given that the natural reading of 'enabling' is causal, as can be seen in the McDowell–Dennett exchange, 'enabling conditions' is not the best term for Cassam's purposes.[4]

What about 'background conditions'? The natural contrast with 'background' should be 'foreground' or similar notions, but it is unclear why Cassam's level 3 involves anything like background conditions if we have this contrast in mind. Here it is illuminating to see how 'background conditions' are used in the literature on the neural correlates of consciousness (NCCs). Let's suppose that V1 to V4 and certain parts of the prefrontal cortex are jointly responsible for visual consciousness. If that is so, it is apt to say that certain activities in V1 to V4 and certain parts of the prefrontal cortex are the enabling conditions of visual consciousness. They are *in the foreground*, as it were. What are the relevant *background* conditions? Well, other parts of the brain need to function appropriately; the organism needs to be alive; and in order for that to happen, the environment needs to have enough oxygen, water, and so on. The difficult question in this area is where to draw the exact line between the NCCs and the supporting elements, that is, the foregrounds and the backgrounds. However, in order to grasp this distinction, we do not need to settle this theoretical question. Suffice to emphasise that in order to make sense of the backgrounds, we need to have a clear contrast of foregrounds, but it is unclear what the contrast is in Cassam's picture.

Now, one might argue on Cassam's behalf that these are all terms of art, and the fact that 'enabling conditions' and 'background conditions' are used differently by others does not mean that Cassam cannot use those terms in his way.

[4] For more on this with a phenomenological twist, see Wheeler (2013), who aims to reconcile transcendental phenomenology and cognitive sciences. I thank a reviewer for pointing this out.