# Reflections on Systematic Metaphysics

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#### Abstract

This essay is a series of reflections on the topic of systematic metaphysics. Starting with the systematicity of metaphysics itself, we move to the relationship between metaphysics and logic, and then the relation of logic to other parts of philosophy. What will transpire is the fact that philosophy itself is a systematic whole, with logic providing a central node of the web of interconnections

### **Reflection 1: Metaphysics**

How, exactly, to define 'metaphysics' may be a contentious matter. However, according to nearly any reasonable specification, the various areas of metaphysics, their problems, and solutions form an interconnected network.

Thus, let is take—more or less at random—a standard text book in the area, Lowe's 'A Survey of Metaphysics'.<sup>1</sup> This lists the various neighbourhoods in the suburb of metaphysics as follows. Just because of the systematic interconnections between the areas, the chunking has a certain degree of arbitrariness, but it will be fine for the purpose at hand.

- 1. Identity and Change
- 2. Necessity, Essence, and Possible Worlds

 $<sup>^{1}</sup>$ Lowe (2002).

- 3. Causation and Conditionals
- 4. Agents, Actions, and Events
- 5. Space and Time
- 6. Universals and Particulars

A little thought shows how issues in any one of these neighborhoods is hostage to issues in others. Let me illustrate, taking a few topics from Lowe's list, again more or less at random.

A question that falls under neighbourhood 1 is what makes something the same thing over time (if it is). Clearly, to determine whether x is the same as y we have to understand what identity is. There are many possible answers. Suppose one takes a standard one: x and y are identical iff they have the same properties. We then have to worry about what a property (a universal) is. If being red is a property then something that changes colour is not the same object after the change. But maybe properties are of the form 'red a time t'. If so, that no longer follows. But are properties of this form? We are in neighbourhood  $6.^2$ 

A question that falls in neighbourhood 2 is whether things have essences. But how to understand essences? One possible answer is that they are things that an object has in every possible world where it exists. But now we have to understand what a possible world is, and what worlds there are. Possibility is of many kinds. Which one is at issue here? Is the charge that an electron has a matter of metaphysical necessity, or just physical necessity? If the latter, we have to worry about the nature of causal laws. So we are in neighbourhood  $3.^3$ 

A problem that falls in neighbourhood 6 is whether there can be uninstantiated universals. But what exactly is instantiation—a problem as old as Plato and as modern as Bradly. And does the instantiation have to be at this world or can it be at others? If the latter, which ones are permissible? We are back with the problem of worlds. And do the worlds in question have to be possible, or can they be impossible? Is the universal of being a round square instantiated because at some impossible world there is an object which instantiates it? We are in neighbourhood  $2.^4$ 

<sup>&</sup>lt;sup>2</sup>See Gallois (2016).

<sup>&</sup>lt;sup>3</sup>See Robertson Ishii and Atkins (2020).

<sup>&</sup>lt;sup>4</sup>See MacBride (2009).

Perhaps all this is labouring the obvious. The situation will indeed be obvious to anyone who has wrestled with one of these metaphysical problem—or virtually any other. The roads that run between the neighbourhoods of the suburb of metaphysics are many, and carry much traffic. Solutions to problems involving one area are always liable to be hostage to what goes on in others.

### **Reflection 2: Logic and Metaphysics**

It is not only the thoroughfares between the neighborhoods of metaphysics which carry much traffic. There is heavy traffic between metaphysics and other suburbs of philosophy, and especially logic.

There have been times of innocence in the history of philosophy when philosophers took logic to be metaphysically neutral. Perhaps the logical positivists and their immediate descendants were the most recent innocents.

The view is, however, false—as even a superficial overview of the history of logic and metaphysics quickly shows.<sup>5</sup> For a start, metaphysical views can have logical implications.

In the somewhat notorious chapter 9 of *De Interpretatione*, Aristotle appears to argue that contingent statements about the future are (now) neither true nor false, on pain of fatalism. Both how, exactly, to interpret Aristotle's arguments, and whether or not they are sound, are discussed at length by Aristotle scholars. But whatever is the case concerning these things, the view that the future is "open" in this way is not an implausible one. Facts about the past and present now exist and render statements about the past and present true or false. By contrast, future facts do not (yet) exist, so there is (as yet) nothing to make statements about the future true or false. There are, then, statements about the future which are neither true nor false. The principle of bivalence fails.

True, Aristotle did not take the principle of bivalence to be a principle of logic, but of metaphysics. But modern logicians now take it to be so. "Classical" logic—that is, the logic invented/discovered around of the turn of the 20th Century by Frege, Russell, and others, endorses the principle of bivalence. But we know that there are systems of logic in which it fails. Indeed, the first of these, a 3-valued logic, was invented by Łukasiewitz, who

<sup>&</sup>lt;sup>5</sup>These and a number of other examples are discussed in further detail in Priest (2019).

was motivated by Aristotle's arguments.<sup>6</sup>

Another example: A standard metaphysical view in the philosophy of mathematics is that mathematical entities are abstract objects, inhabiting some realm, causally isolated from the realm of physical objects. Many philosophers, however, have found such a view unpalatable. One such was Brouwer in the early years of the 20th Century. He argued that mathematical objects must be thought of as mental constructions, so that for a mathematical object to exist is simply for there to be some mental process for constructing it. Now suppose that we wish to show that there is an object satisfying some condition. That is, we wish to show that  $\exists x A(x)$ . We assume for reductio that  $\neg \exists x A(x)$ , and derive a contradiction. Hence we have shown that  $\neg \neg \exists x A(x)$ . But this does not give us a way of constructing an x satisfying A(x). Hence, we have not shown that  $\exists x A(x)$ . The principle of double negation then fails in one direction. But again, the principle is an orthodox part of classical logic. So this metaphysical view shows that classical logic is not correct. Brouwer himself never constructed an appropriate logic. (Indeed, he was highly skeptical of the virtue of formal logic in mathematics.) But in the 1920s, Heyting did so. The logic is now known as intuitionist  $\log c.^7$ 

Aristotle and Brouwer endorsed their metaphysical pictures, and so endorsed (or rejected) certain logical principles. But sometimes in the history of philosophy, things have gone the other way. Let us look at a couple of examples of this.

Classical logic is a consequence relation defined on sentences of a formal language. There are atomic sentences in the language composed of predicates and terms. Logical connectives and quantifiers are then used to construct more complex sentences. In an interpretation for the language, predicates and terms are assigned certain entities, and how these are configured determines the truth or falsity of the sentences using those predicates and terms, the truth values of which sentences are independent of each other. The truth/falsity of the complex statements are determined by the truth/falsity of their atomic constituents and the truth conditions of the connectives and quantifiers.

So much did this picture impress Wittgenstein, that in the *Tractatus*, he constructed a metaphysics from it (though later he came to reject this). The

 $<sup>^{6}</sup>$ See Haack (1974), ch. 4.

<sup>&</sup>lt;sup>7</sup>See Haack (1974), ch. 5.

world is described by a certain language of this kind (an ideal language). It is composed of independent atomic facts, which are the truth/falsity makers for atomic sentences. The truth/falsity of compound sentences are then determined by the truth conditions of the connectives and quantifiers. Atomic sentences are composed of names enformed in a certain way, and atomic states of affairs are composed of objects enformed in a certain way. An atomic sentence describes the state of affairs if the names in it name the objects in the state of affairs, and the sentence and the state of affairs have the same form. The sentence is true if the state of affairs described is a fact, that is, exists. In other words, Wittgenstein read off the structure of the world from the structure of an the ideal language. Frege/Russell logic delivered the metaphysics of the *Tractatus*.<sup>8</sup>

Another example: Half a century later, something similar was to happen, but with modal logic. Contemporary modal logic was instigated by C. I. Lewis, who, in the 1920s proposed a number of different axiom systems of modal logic. The modal language involved had no formal semantics. Appropriate semantics were discovered/invented some half a century later, most notably by Kripke. The semantics involved entities provocatively called *possible worlds*.  $\Box A$  holds at a world iff A holds at all (accessible) worlds.

As a formal semantics, worlds are just arbitrary mathematical entities of some kind. However, if such a semantics is to be more than a piece of mathematics, its entities must relate to reality in an appropriate fashion. It was therefore appropriate to take these mathematical objects to represent, literally, possible worlds. There is an actual world, and it comes with a raft of non-actual possible worlds. Kripke interpreted the semantics in just this way. Moreover, he went further than this. In quantified modal logic with identity, there are objects which behave in certain ways. In *Naming and Necessity*, Kripke, tapping into certain linguistic intuitions, read off the metaphysics of these objects from their behaviour in the semantics. Hence, he obtained certain metaphysical notions and consequences, such as rigid designators, essential properties, the necessity of identities.

A few years later, David Lewis added another twist the the metaphysics. Kripke was a bit coy about what, exactly, possible worlds were. Lewis proposed an understanding of them as concrete physical worlds, just like our own, except that they are causally isolated from ours. The nature of reality

<sup>&</sup>lt;sup>8</sup>See Proops (2017).

was then again being read off from a certain take on the formal semantics.<sup>9</sup>

Now, the moves made by Aristotle and Brouwer run *modus ponens* in a certain way. Metaphysics is thus and so, so logic is thus and so. But one could run a *modus tollens* instead. Logic is not thus and so, so metaphysics in not thus and so. Logic rules out truth value gaps, so the open future is wrong. Double negation holds, so mathematical objects are not simply mental constructions.

Similarly, the moves made by Wittgenstein and Kripke run *modus ponens* in a certain way. Logic is thus and so, so metaphysics is thus and so. But one could run a *modus tollens* instead. Metaphysics is not thus and so, so logic in not thus and so. A metaphysics of atomic facts cannot be correct (perhaps following the later Wittgenstein), so there is something wrong with the semantics of classical logic. Or (following Quine) modal metaphysics makes no sense, so the semantics of modal logic is misguided.

Hence, in both cases, one might walk the road between logic and metaphysics in either direction, depending on one's starting place. Quite generally, in the following reflections, we will note various connecting roads; and these may be travelled in either direction.

# Reflection 3: Logic and the Rest of Theoretical Philosophy

There is a traditional distinction between the suburbs of philosophy. Some are termed *theoretical philosophy*; some, *practical philosophy*.<sup>10</sup> Like most distinctions of substance, there are grey areas in the middle, but this one will do for present purposes. Theoretical philosophy comprises the areas of logic, metaphysics, epistemology, and, in the 20th Century, the philosophy of language. Practical philosophy comprises, roughly, those areas that deal with value issues: ethics, aesthetics, political philosophy.

The previous reflection established tight connections between logic and metaphysics. There are equally tight connections between logic and the other parts of theoretical philosophy.

Epistemology is that area of philosophy that deals with knowledge—or

 $<sup>^9 \</sup>mathrm{See}$  Menzel (2016).

<sup>&</sup>lt;sup>10</sup>In Britain, it was more traditional to use the epithets, *logic and metaphysics* and *moral philosophy*.

maybe better, well-grounded belief—and the means we have for achieving this. Indian philosophy has a useful name for these,  $pram\bar{a}nas$ . Traditional philosophy (East and West) includes amongst the  $pram\bar{a}nas$  sensory perception and logic—deductive and non-deductive. Indian philosophy, quite correctly, standardly adds a fourth: testimony. Western philosophy is now belatedly doing the same.<sup>11</sup>

As will be clear, that makes logic a part of epistemology. Matters of logic will therefore bleed over into matters of knowledge. To take an obvious example. Suppose we have an otherwise unproblematic proof of some mathematical result which uses double negation in the form  $\neg \neg A \vdash A$ . Are we—or better, when are we—justified in accepting the result? One who endorses classical logic will say: *always*. One who endorses intuitionist logic will say: *when the statement A is decidable*.

The impact of logic on epistemology goes well beyond this. Suppose that we have some well-grounded bunch of beliefs, but that we acquire some new information, which may well conflict with what we currently accept. How do we modify our beliefs? Modern logic has a well established branch dealing with this question. It was started by the AGM (Alchourrón, Gärdenfors, and Makinson) theory of belief-revision; but it has now gone a long way beyond this. And as one might expect, there is controversy amongst logicians about the best account of how to revise one's beliefs. For example, if the information *does* contradict something presently believed, is it ever—or maybe, again, under what conditions is it—possible simply to add it to one's beliefs? A classical logician will say: *never*. A paraconsistent logician will say *sometimes*, and then spell this thought out with an account of the conditions in which this is the case—which we need not go into here.<sup>12</sup>

But the natural relevance of general epistemological considerations may flow the other way—*into* logic. How do we know what deductive logic is correct? (There is a similar question concerning non-deductive logic; but let us ignore this matter here.) A central part of the study of logic delivers theories about what follows from what, and why. The West has had many such theories over the last 2.5 millennia, and our beliefs have consequently been revised in the process. How does one determine that a new theory is better than an old one? More generally, given a bunch of logical theories on the table, how does one determine which is the best?

<sup>&</sup>lt;sup>11</sup>On Indian epistemology, see Phillips (2019).

 $<sup>^{12}</sup>$ See Hansson (2021).

Traditional philosophy held that there was something special about theorychoice in logic. The best theory was to be determined by some kind of self-evident *a priori* reflection. But a very different view is now emerging: the best theory is determined by our usual criteria of rational theory choice (whatever those are)—perhaps suitably tailored to their subject matter. For obvious reasons, the view has come to be called by the (rather ugly) name of logical *anti-exceptionalism*. What this means is that the best theory is to be determined by some from of non-deductive inference—some form *abduction*. So I prefer the name *logical abductivism*. But whatever one calls it, it is clear that epistemic considerations concerning belief revision, and more generally, rational theory choice, can have an impact on our views about the correct logic.<sup>13</sup>

Turning to the philosophy of language: however one determines what follows from what and why, it is clear that there is an intimate connection between at least some deductive validities and meaning. Thus, 'It is not the case that Trump won the 2020 US president election, so it is not the case that he won the election and did so legitimately' would seem to be true in virtue of the meanings of 'not' and 'and'. And maybe, 'grass is green; so grass is coloured' would seem to be true in virtue of the meanings of 'green' and 'coloured'. How one cashes out logic-relevant meanings is contentious. Is meaning determined by truth conditions, as in model theory? Or is meaning determined by governing rules of inference, as in inferentialism?

But whatever the answer, facts about inference and facts about meaning are intertwined. Meaning is, of course, one of the central notions of the philosophy of language. So logic and the philosophy of language bear on each other. One might take our best theory of inference to tell us about the meanings of certain words, notably the logical particles. Alternatively, one might take facts about meaning to tell us something about inference. So, for example, one can apparently say perfectly meaningfully—indeed truly—'Some things don't exist, such as Santa Claus and the Loch Ness Monster'. So the inference 'Some x is such that  $A(x) \vdash$  Some existent x is such that A(x)' is invalid.<sup>14</sup>

This is a matter of semantics, but another standard part of the philosophy of language also bears on logic (this time, non-deductive) too: pragmatics. As made very familiar by Grice, there are certain norms governing what is

 $<sup>^{13}</sup>$ See the essays in Hjortland (2019).

 $<sup>^{14}</sup>$ See Speaks (2019).

said in a conversation. So suppose I say, 'What is the capital of Nicaragua?' and you say, 'Well, it's either Managua or Tegucigalpa'. I can infer that you don't know which. This does not follow from what you actually said, but it follows from the fact that you said it, in virtue of the conversational maxim: be as informative as you can. Of course, this is a non-monotonic (aka non-deductive) inference. Had you followed this up with 'So I've given you a clue'. The conclusion would no longer follow. So pragmatics is also connected with the validity or otherwise of certain kinds of inference.<sup>15</sup>

### **Reflection 4: Logic and Practical Philosophy**

The connections between logic and the suburbs of practical philosophy are less immediate than those between logic and the suburbs of theoretical philosophy, since the major connections tend to run via the (other) suburbs of theoretical philosophy.

For a start, systems of values and norms very often have metaphysical undergirdings. A very obvious example: a divine command theory of morality presupposes the existence of a divinity. But less simplistic ethical views often do so too. For example, consider a virtue-ethics of morality, such as that espoused by Aristotle or some contemporary virtue ethicists. Virtues (and vices) depend on a notion of human flourishing, and so presuppose a metaphysical theory of human nature. Or consider a Buddhist ethics. This presupposes that people—and all other kinds of things, for that matter—are deeply interconnected with each other, in a web of causal and conceptual connections. We have, hence, a very general theory, not only of what it is to be the kind of thing which is a person, but of what it is to be a thing, quite generally. Finally, consider a social-contract theory of political obligation. This presupposes at least the coherence of a story about people according to which they are social atoms, complete with interests, who come together to make agreements which advance many of those interests, though perhaps at the cost of giving up some others. This is almost the opposite of the Buddhist theory. The connection between ethics and metaphysics is patent in all these cases.<sup>16</sup>

Another path between logic and practical philosophy goes through the

 $<sup>^{15}</sup>$ See Davis (2019).

 $<sup>^{16}</sup>$ I don't know of a good single reference on this matter, but Walsh (1936) and Priest (2021), §§2.3.2, 5.3.2 cover some of the ground.

philosophy of language. Philosophies of language give us theories of meaning. Such theories may or may not be compatible with an account of meaning required by various theories of value. For example, many theories of value-judgments hold that such judgments are not truth-apt. An obvious example of such a theory was that of logical positivism, which took value judgments to be expressions of attitudes. But many theories of meaning will make this impossible. For example, most theories of intentional discourse will say that the meaning of *Penny believes that Melbourne is in Australia*, depends on the meaning of *Melbourne is in Australia*—the proposition that this expresses, as it were. But then in *Penny believes that abortion is wrong, abortion is wrong* must express a proposition, and so be truth apt. It cannot merely express disapproval of abortion, though it may do that too.<sup>17</sup>

Or consider a view which assimilates norms to commands, so that one ought not to have an abortion means something like do not have an abortion. Normative statements can clearly be consequents of conditionals, as in: if the foetus is in the third trimester, one ought not to have an abortion. But then what this means is if the foetus is in the third trimester, do not have an abortion. And so one can apply modus ponens: The foetus in the third trimester, so do not have an abortion. There must therefore be a logic of commands (imperatives), which is not a part of standard logic at all. Again, the connection between ethics and the philosophy of language is patent.<sup>18</sup>

Other routes between logic and practical philosophy go through epistemology. Assuming that evaluative or normative judgments are truth-apt, there is then a question of how we know which ones are true.

Some, such as Moore, have argued that properties of value are non-natural properties. So, if it is true that this painting is beautiful, beauty is a non-natural property of the painting, distinct from the composition of its colours and lines. Now, non-natural properties, whatever they are supposed to be, are not in the causal order. So even if we can see the composition of the colours and lines, there is an epistemological question of how we know that the painting has that property. It does nothing to help matters to say that whenever the composition is thus and so, the painting is beautiful. For there is then the question of how we know that generalisation. We are stuck with tricky epistemological issues.<sup>19</sup>

 $<sup>^{17}</sup>$ See van Roojen (2018).

<sup>&</sup>lt;sup>18</sup>See Fillion and Lynn 92021),

<sup>&</sup>lt;sup>19</sup>See Campbell (2019).

In practice, any answer to the question of how we know that an ethical claim is true is likely to situate the judgment within a general moral theory (deontological, consequentialist, etc). Since there are a number of such theories, we have to face the question of when one such theory is rationally preferable to another. So we are back to the epistemic question of rational theory choice.

There are, then, numerous connections between matters in practical philosophy and issues in metaphysics, the philosophy of language, and epistemology. These may themselves be connected with issues in logic. And such connections can be transitive.

Our brief survey has already exposed a couple such connections. Certain views of norms requires there to be a logic of imperatives. Choosing between different moral theories requires an appropriate non-deductive logic of theory choice. And if such logics turn out not to be available, the views which require these things cannot be right. Here is another connection. Suppose that one is not a realist about values, and one takes these to be mental constructions of some kind. Then one may well hold that reasoning about them should be governed by intuitionist logic, not classical logic.

A final example may appear rather esoteric (at least to those who know nothing about traditional Indian philosophy), but makes the point very clearly. Consider the notion of intolerance. Many will hold this to be a vice, at least under many conditions. Intolerance can arise for many reasons; but undoubtedly a major source of intolerance of another person concerning religion or morals, is believing that one's own view is right and that the view of the other is wrong. Such intolerance will then be undercut if there is no fact of the matter about who is right. The Indian Jain philosophers held that this was indeed the case. The appropriate view of the world is one of  $anek\bar{a}ntav\bar{a}da$ , non-one-sidedness. The Jain philosophers used this as part of their case for non-violence, *ahimsa*.

But what can the world be like if there is no fact of the matter about such things? The Jains developed a very distinct metaphysical view of the world. Reality is multi-faceted, like a cut diamond. One view can hold of one facet; an opposed view can hold of another facet. On the basis of this, they developed a highly distinctive 7-valued view of logic (saptabhngi).<sup>20</sup>

A much more flat-footed way of understanding the claim that on certain questions there is no fact of the matter, is to suppose that those claims

 $<sup>^{20}</sup>$ See Priest (2008).

have no truth or falsity makers, and so are neither true nor false. We have, in fact, already met this view with Aristotle on future contingents, and seen how this can be taken to give rise to a 3-valued logic. The target of Aristotle's application were claims of a kind not likely to generate intolerance. (Though who knows? Humans have a remarkable ability to be intolerant to those who disagree with them about anything.) But one might well apply the view to statements of a moral or religious nature, which certainly do have the potential to generate intolerance: abortion is [not] wrong; Christ was [not] fully human; eating pigs is [not] sinful.)

There is, then, a connection between a moral vice and a 3-valued logic which goes by way of a "gappy" metaphysical view of reality.

## Reflection 5: Logic as a Central Junction of Philosophy

We have seen that there is a vast network of connections between logic and the other suburbs of philosophy. And because these connections can be travelled in either direction, and the connections are transitive, they induce connections between any two areas of philosophy. We might depict matters thus:

#### $\operatorname{area}_1 \rightleftharpoons \operatorname{logic} \rightleftharpoons \operatorname{area}_2$

Thus, what happens in area<sub>1</sub> may bear on logic, and this, in turn, may bear on what happens in area<sub>2</sub>. For example, what happens in an analysis of causation may show that certain forms of counterfactual reasoning hold or fail; and reasoning about virtues often involves counterfactuals (since virtues are usually dispositions). So we may move from metaphysics to ethics (or vice versa) via logic. Logic, then, forms a hub of connections between any two (other) areas of philosophy. Logic is a central junction of philosophy.

One might suggest that other areas of philosophy also act as such junctions. And certainly it is often possible to move from one suburb of philosophy to another through a third. However, nowhere do the connections seem as dense as in logic.

It is hard to take an area of practical philosophy to play a central role in providing connective tissue, simply because the connections—even between the different suburbs of practical philosophy—often go via areas of theoretical philosophy (logic, metaphysics, epistemology, language). There is more hope in supposing that some other area of theoretical philosophy can play a connecting role similar to that of logic.

On inspection, however, the connections involved in such cases tend to arise *en passant*. Thus, for example,<sup>21</sup> one might argue that epistemology is a central junction, since in order to address problems in the other areas, we need to have an understanding of what solutions are rationally well-grounded. This is an epistemological issue.

True, solution to any philosophical problem requires well grounded beliefs, and so raises the question of what constitutes this. However, it is usually not the case that one needs to answer that question to answer a first-order issue: an inchoate grasp of the notion will typically suffice. For example, take the first issue raised in Reflection 1 (or any of the other issues raised there): what makes something the same thing over time? The central issues here embroil us in issues of causation, the philosophy of mind, mereology. None of these is an epistemological issue *per se*.

Or one might suggest that any philosophical problem, or solution thereto, must be articulated in language, so philosophy of language is central junction. Now, sometimes, it is true, addressing a philosophical problem requires one to get straight on what it is; this requires us to untangle various ambiguities and unclarities in the way it has been formulated, and so concerns language; but such a procedure is a *precursor* to addressing the problem; and once completed, language tends to drop out of the picture. The days when it was thought (by some people) that one could solve substantial philosophical problems simply by understanding the way that language is used are (fortunately) long gone. Thus, take the second issue raised in Reflection 1, of whether things have essences. Some such a Quine, it is true, argued this was simply linguistic confusion. But philosophers from Aristotle to Nāgārjuna to Scotus to Kripke (would) have taken Quine's view itself to be confused. And when we do address the issue, we are thrust into matters of change, causation, and even ethical responsibility. None of these is a linguistic issue per se.

### **Reflection 6: Logic and Metaphysics Again**

Of all the suburbs of philosophy that might be taken to provide a junction for the whole of city equal in centrality to logic, the most plausible in meta-

<sup>&</sup>lt;sup>21</sup>Many thanks for the following two thoughts to an anonymous referee.

physics, just because of its entanglement with so many issues. Indeed, the view that logic and metaphysics provide two central junctions, with heavy traffic between them, is a very plausible one.

For all that, logic is central in which no other area, including metaphysics, can claim to be. Philosophers do not just have views; they argue for and against them. Of course, all theoretical inquiries argue. But philosophy, more than any other discipline—with perhaps the exception of law—is self-conscious about its arguments. And it is concerned greatly about their forms—which are legitimate and which are not, why and when? This is, of course, the field of logic. The relevant concerns may take many shapes; for example, worries about whether a certain inference using counterfactuals or probability is valid; or about whether an argument begs the question, or is an *ignoratio elenchi*.<sup>22</sup>

Investigations of such issues can, then, bear directly on whether an argument deployed in a branch of philosophy is legitimate. Conversely, as several examples in previous reflections demonstrated, what goes on in another branch of philosophy, can bear on whether a form of argument is legitimate. Logic, then, is a junction which, unlike any other suburb of philosophy, including metaphysics, connects immediately to all other areas.

## **Reflection 7: Concluding Reflection**

Philosophy is a city of many suburbs, and indeed many neighbourhoods within suburbs. But in the end, they all connect up by various routes, either many or few, either direct or indirect. The suburb of logic plays a distinctive and central role in this network of connections.

This does not show that logic is more important than any other branch of philosophy, or more fundamental—whatever that might mean. Nor does it mean that you have to visit that suburb if you are interested only in some other suburb. Nor does it mean that to get from one suburb to another you have to go through it: some routes, as it were, run across town. What it means is that logic is something like the suburb of the central railway station of the sprawling city of philosophy.

 $<sup>^{22}</sup>$ See Dutilh Novaes (2021).

### References

- Campbell, R. (2019), 'Moral Epistemology', in E. Zalta (ed.), Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/moralepistemology/.
- [2] Davis, W. (2019), 'Implicature', in E. Zalta (ed.), *Stanford Encyclopedia* of *Philosophy*, https://plato.stanford.edu/entries/implicature/.
- [3] Dutilh Novaes. С. (2021),'Argument and Argumentation', (ed.), in Zalta Stanford Encyclopedia Philosophy, E. of https://plato.stanford.edu/entries/argument/.
- [4] Fillion, N., and Lynn, M. (2021), 'The Content and Logic of Imperatives', Axiomathes 31: 419–436.
- [5] Gallois, A. (2018), 'Identity over Time', in E. Zalta (ed.), Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/identity-time/.
- [6] Haack, S. (1974), *Deviant Logic*, Cambridge: Cambridge University Press.
- (2021),S. О. 'Logic Belief Revision', [7] Hansson, of in Zalta (ed.), Stanford Encyclopedia Philosophy, Ε. of https://plato.stanford.edu/entries/logic-belief-revision/.
- [8] Hjortland, O. (ed.) (2019), Australasian Journal of Logic 16, #7, a special issue on anti-exceptionalism about logic, https://ojs.victoria.ac.nz/ajl/issue/view/652.
- [9] Lowe, J. (2002), A Survey of Metaphysics, Oxford: Oxford University Press.
- [10] MacBride, F. (2009). 'Universals: the Contemporary Debate', ch. 27 of Le Poidevan, R., Simons, P., McGonigal, A., and Cameron, R. (eds.), *The Routledge Companion to Metaphysics*, London: Routledge.
- [11] Menzel, C. (2016), 'Possible Worlds', in E. Zalta (ed.), Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/possible-worlds/.

- [12] Phillips, S. (2019), 'Epistemology in Classical Indian Philosophy', *Stanford Encyclopedia of Philosophy*, https://plato.stanford.edu/entries/epistemology-india/.
- [13] Priest, G. (2008), 'Jaina Logic: a Contemporary Perspective', History and Philosophy of Logic 29: 263–278.
- [14] Priest, G. (2019), 'Metaphysics and Logic: an Observation in Metametaphysics', Giornale di Metaphysica 1: 68–77.
- [15] Priest, G. (2021), Capitalism—its Nature and its Replacement, New York, NY: Routledge.
- [16] Proops, I. (2017), 'Wittgenstein's Logical Atomism', in E. Zalta (ed.), Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/wittgenstein-atomism/.
- [17] Robertson Ishii, T. and Atkins, P. (2020), 'Essential vs Accidental Properties', in E. Zalta (ed.), *Stanford Encyclopedia of Philosophy*, https://plato.stanford.edu/entries/essential-accidental/.
- [18] van Roojen, M. (2018), 'Moral Cognitivism vs Non-Cognitivism', in E. Zalta (ed.), Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/moral-cognitivism/.
- [19] Speaks, J. (2019), 'Theories of Meaning', in E. Zalta (ed.), *Stanford Encyclopedia of Philosophy*, https://plato.stanford.edu/entries/meaning/.
- [20] Walsh, D. (1936), 'Ethics and Metaphysics', International Journal of Ethics 46: 461–472.