

# What Is Possible?\*

Daniel von Wachter<sup>†</sup>

10 June 2019

## Abstract

This paper argues that there are true synthetic modal claims and that modal questions in philosophy in general are to be interpreted not in terms of logical necessity but in terms of synthetic necessity. I begin by sketching the debate about modality between logical positivism and phenomenology. Logical empiricism taught us to equate being tautological with being necessary. The common view is that tautologies are necessary in the narrow sense but that there is also necessity in a wider sense. I argue against this that we should distinguish necessity from analyticity and possibility from consistency.

Keywords: modality, logical positivism, phenomenology

## 1 Introduction

(1.1) The common view about modality that is taught to students today runs like this: Necessity is a mode of truth. A true

---

\*I thank the John Templeton Foundation for funding project 59226, ‘The Openness of the Universe for Free Will and Special Divine Action’, during which this article was completed.

<sup>†</sup>International Academy of Philosophy, Santiago de Chile, <http://von-wachter.de>, email: epost@ABC.de (replace ‘ABC’ by ‘von-wachter’)

proposition is either necessarily true or contingently true. The  
5 strictest kind of necessity is logical necessity, it includes analytic  
propositions like ‘All bachelors are unmarried’. They are true in  
virtue of the meanings of words. Second, there is metaphysical  
necessity, also called ‘broadly logical necessity’, it includes pro-  
positions like ‘Water is H<sub>2</sub>O’. It was introduced by Putnam and  
10 Kripke. Third, there are physical necessities, which are true in  
virtue of the laws of nature.<sup>1</sup>

(1.2) In philosophy we should often start re-examine the re-  
ceived views and from scratch again by reflecting on what the  
question is and by asking it anew. In this article I shall inquire  
15 how modal questions arise and what possibility is.

Concerning modality, it helps to remember how we got to  
today’s standard view. Hermann Lotze (1817-1881), one of the  
most influential philosophers of his time, wrote about his view  
that there are synthetic necessities (‘synthetische Urtheile *a pri-*  
20 *ori*’): ‘we defend here a crucial element of German philosophy,  
for which we are attacked by all nations.’<sup>2</sup> Fifty years later the  
logical positivists (also called ‘logical empiricists’) attacked syn-  
thetic necessity, which the phenomenologists defended. The lo-  
gical positivists won. Some aspects of their view were later mod-  
25 ified by Quine, Putnam, and Kripke, but the core of their view  
is the dominating view today, and the phenomenological posi-  
tion is forgotten. In this article I shall present an approach that  
is entirely opposed to the positivist view and close to the phe-  
nomenological position.

---

<sup>1</sup>For example, Sider 2003, p. 180 and Priest 2018, p. 2.

<sup>2</sup>‘[W]ir [vertheidigen hier] einen wesentlichen Punkt deutscher Philosophie  
[...], über den wir von allen Nationen angegriffen werden.’ (Lotze 1874,  
p. 581)

## 30 2 Phenomenology and logical positivism

(2.1) The phenomenologists, for example Edmund Husserl, Max Scheler, and Adolf Reinach, put forward modal claims about the world, which they called *material* or *synthetic a priori* (cf. Smith 1992). Examples are ‘Nothing can be green and red all over’,  
35 ‘There cannot be a tone without a pitch’, or ‘The value of being morally good is, necessarily, higher than the value of being pleasurable’ (Scheler 1916, pp. 122-6; criticised by Schlick 1930b, p. 24). The phenomenologists were enthusiastic about the realm of the material apriori. Their philosophical project was to discover  
40 synthetic *a priori* truths about all sorts of things, such as values, rights, things and properties, speech acts such as promising, holiness, love, etc.<sup>3</sup>

(2.2) The logical positivists found all this very mysterious, for reasons of epistemology. ‘A priori’, according to Kant, means  
45 independent of experience. So is the phenomenologists’ *material a priori knowledge* knowledge about the world (i. e. about things independent of us) which is not acquired through some kind of experience? That would be mysterious, because how can we have knowledge without being related to the objects of this knowledge  
50 through experience? If one has no experience of something, then one has no knowledge about it.

(2.3) The phenomenologist, however, did not mean that material *a priori* knowledge is independent of *all* experience. They just meant that it is not acquired directly through sense experience, but through a special kind of experience. That is at least  
55 how Max Scheler formulated their position, introducing the term ‘phenomenological experience’ (Scheler 1916, 68–72 and 122–126). Phenomenological experience is experience in introspection, ‘Anschauung’, or ‘Wesensschau’. ‘What is given *a priori* is as much

---

<sup>3</sup>Reinach 1913, Ingarden 1974, Otto 1917, Hildebrand 1971.

60 founded on “experience” as that which is given through experi-  
ence in the sense of observation and induction. All that is given  
is based on experience.<sup>4</sup> So according to Scheler, we can know  
some things by becoming aware of them when we think about  
them, sitting in our arm chair. For example, we can know that  
65 there cannot be a tone without a pitch by considering the nature  
of a tone. Of course, the logical positivists did not like this idea  
better than the idea of knowledge without experience, because it  
conflicts with their principle that all knowledge comes through  
sense experience.

70 (2.4) Therefore the logical positivists rejected the phenomeno-  
logists’ material apriori. They claimed that there are no modal  
truths about the world. So are statements like ‘There cannot be  
a tone without a pitch’ false? Or meaningless? That is not what  
the logical positivists said, they avoided the implausible claim  
75 that there are no modal truths. But they had to employ a trick.  
They said, look there are statements like ‘Bachelors are unmar-  
ried’. They are called ‘analytic statements’, or ‘tautologies’. A  
tautology is a statement that is true just in virtue of its form.  
It is a statement whose negation is self-contradictory. There is  
80 nothing mysterious about tautologies because they follow from,  
or are true in virtue of, the meanings of the words. Wittgenstein  
took a slightly different view than the logical positivists here,  
arguing that ‘Bachelors are unmarried’ is a ‘grammatical proposi-  
tion’ which ‘expresses a *rule* for the correct use of’ a word (Glock  
85 2008, p. 25). Thus according to Wittgenstein’s conventionalist  
view, the sentence determines or describes the meaning of a word,  
whereas the logical positivists interpreted ‘Bachelors are unmar-

---

<sup>4</sup>Aus dem Gesagten ist klar, daß, was immer *a priori* gegeben ist, ebenso-  
wohl auf “Erfahrung” überhaupt beruht wie all jenes, das uns durch “Er-  
fahrung” im Sinne der Beobachtung und der Induktion gegeben ist. Insofern  
beruht alles und jedes Gegebene auf “Erfahrung?” (71 Scheler 1916, pp. 122-  
6)

ried' in the same sense as 'Unmarried men are unmarried' and said that the sentence follows from the meanings of the words.

90 (2.5) In a philosophical *coup d'état*, as if they wanted to prevent that anybody should ever think again that there are synthetic necessity statements, the logical positivists substituted necessity by analyticity and called it 'logical necessity'. Let us call tautologies 'necessary' and allow no modal statements besides  
95 those claiming that something is, or is not, tautological. That is, interpret 'It is necessary that  $p$ ' as ' $p$  is analytic' and 'It is possible that  $p$ ' as ' $p$  is synthetic'. To the phenomenologists they put the question: 'Are those judgements [modal statements like "There cannot be a tone without a pitch"] which you take to be  
100 synthetic and *a priori* really synthetic and *a priori*'? (Schlick 1930a, p. 23) They argued that the phenomenologists' material *a priori* statements are in fact analytic. They are just about concepts. As 'Bachelors are unmarried' is true because of the definition of the word 'bachelor', so 'There cannot be a tone without pitch' is true because of the definition of the word 'tone'.  
105

(2.6) Thus the logical positivists claimed that a statement is necessary if, and only if, it is analytic, and a statement is necessary if, and only if, it is *a priori*. Questions about whether something is possible became questions about whether a certain  
110 statement is self-contradictory.

(2.7) The common view today is still close to the logical positivist doctrine and goes like this. Being necessary is a way of being true. Some propositions are necessarily true, the others are contingently true. Typical examples necessary propositions  
115 are 'All bachelors are unmarried', 'Nothing can be red all over and green all over', 'If it is snowing, it is snowing', and 'If it is snowing, it is either snowing or raining' (Priest 2018, p. 2); examples of contingent propositions are 'There are white caribu' and 'John's caribu is white'. This kind of necessity is *logical necessity*. Logical necessity is the strongest kind of necessity, and  
120

it is the kind of modality that is relevant for philosophical modal questions (e.g. whether backward causation is possible, or whether there can be a zombie, i.e. a copy of my body that has no mental life, or whether it is possible that I shall survive my bodily death). I call this view *logicism*. Following Kripke (1972) and Putnam (1975), many widened their concept of logical necessity a bit so that it encompasses so-called ‘a posteriori necessary truths’ such as ‘Water is H<sub>2</sub>O’. This widened concept of necessity is sometimes called ‘broadly logical necessity’ or ‘metaphysical necessity’. Yet wider, according to the common view, is the concept of ‘natural necessity’, which means that the statement follows from the laws of nature. Natural necessity is weaker than logical necessity because all propositions that are logically necessary are also naturally necessary, but not vice versa.

### 3 Analytic statements

(3.1) Now let us begin to re-examine the issue by considering what is characteristic of analytic statements. The clearest definition of a tautological or analytic statement is in terms of a statement being *self-contradictory*. Some other definitions have been devised in order to include in the analytic some of the phenomenologists’ material *a priori* statements and the statements of mathematics. For example, such definitions define an analytic statement as one that is true in every possible world (Lewis 1946, 57) or as one that is true ‘in virtue of its meaning’ (Kripke 1972, 39). They are supposed to make these statements less mysterious because they make *a priori* knowledge turn out to be ‘merely a product of human concepts, meanings, definitions, or linguistic conventions’<sup>5</sup>. But once we reconcile ourselves with the fact that

---

<sup>5</sup>Bonjour 1998, p. 28. For a critical discussion of such approaches to the analytic, see (Bonjour 1998, ch. 2).

150 ‘There cannot be a tone without a pitch’ is not of the same type as  
‘Unmarried men are unmarried’ and is not analytic, we can give  
a neat definition in terms of a statement being self-contradictory.

(3.2) By a tautology I mean a statement whose negation is  
self-contradictory. By a self-contradictory statement I mean one  
155 which says something and denies it, or which speaks of something  
as being and not being in a certain way. For example, ‘Miller is  
married and not married’ or ‘There is an unmarried man who is  
married’. By the negation of a statement I mean the statement  
that results from prefixing ‘It is not the case that’.

(3.3) Now we have to give an account of the paradigm of an  
160 analytic statement, ‘Bachelors are unmarried’. It is difficult to  
find a belief that one may express with this sentence; hence one  
may well say that it has no meaning. But with some charity we  
can make sense of it, in two ways: first, it may be taken as a  
statement about the meaning of ‘bachelor’; secondly, it may be  
165 taken as a tautology.

(3.4) Imagine a conversation between Smith and Brown where  
Brown’s mother tongue is not English. Smith and Brown agree  
that George is married, but nevertheless Brown calls George a  
‘bachelor’. This shows that Brown does not know how the word  
170 ‘bachelor’ is used in English. Smith may now reply to Brown  
‘Oh no, you are using the word “bachelor” wrongly; *Bachelors are  
unmarried.*’ Smith here clearly uses the bachelor sentence to state  
that *being unmarried* is part of the meaning of ‘bachelor’ and that  
one uses the word ‘bachelor’ in order to say about something,  
175 amongst other things, that it is unmarried. The statement is  
what I call a *disguised meaning-statement*, i. e. one which is made  
true solely by the linkage of a certain word to its meaning and  
which does not explicitly have the form ‘A means B’.

(3.5) Although this interpretation of the bachelor statement  
180 is the more natural one, many philosophers will say that when  
taken as an example of an analytic statement the bachelor state-

ment is not to be interpreted in this way. The meaning of the words has to be taken as fixed, they might say. This suggests that they want to use the bachelor sentence in the sense of ‘Un-  
185 married men are unmarried’, that is, in the sense of a tautology. What is special about the bachelor sentence is that the concept of a bachelor is a composed concept, i. e. one which has a nominal definition (as I will explain below). The definition is: by calling something a bachelor one says that it is an unmarried man.

190 (3.6) So how should we use the term ‘analytic’? One could use it just in the sense of ‘tautological’, but for that we have already the term ‘tautological’. It is more useful to use it to refer to statements like the bachelor statement which are *disguised*, as opposed to *overt*, tautologies. So by an analytic statement I  
195 mean a tautology whose negation entails a contradiction between a composed concept and a concept that is a part thereof. An analytic sentence is one that can be interpreted as an analytic statement. Let us have a closer look at these concepts with which analytic statements can be produced.

## 200 4 Composed concepts

(4.1) Some predicates, like ‘x is a bachelor’, are used to say several things about something; they stand for composed concepts. For example, by saying that something is a bachelor, one says that it is a man and one says that it is unmarried. A composed  
205 concept is one which has a nominal definition of the form ‘To say of something that it is C is to say of it that it is P and Q ...’. It is a prerequisite for being a competent user of this word ‘C’ to know this definition and to have the concepts involved. ‘C’ has what Katz (1998) calls a ‘compositional meaning’. A composed  
210 concept has other concepts as parts. For example, the concept of being unmarried is a part of the concept of a bachelor. That concept *x* is a *part of concept y* means that ‘*y*’ is used for saying



about something, besides other things, that it is  $x$ , and there is  
a concept  $z$  which is just like the concept of being  $y$  except that  
215 it is neutral about being  $x$ .

(4.2) For each part of a composed concept we have a concept  
that constitutes the rest of the composed concept. That is, if we  
have the composed concept  $C$  of which concept  $P$  is a part, then  
we have an idea of what a thing is like for which the only reason  
220 that it is not  $C$  is that it is not  $P$ . We have the concept  $C$  minus  
 $P$ : the concept that is like  $C$  except that it is neutral about being  
 $P$ . For example, as the concept of being unmarried is a part of  
the concept of a bachelor, we have a concept of something for  
which the only reason why it is not a bachelor is that it is not  
225 unmarried: namely the concept of a man. (Cf. Zelaniec 1996,  
32f.)

(4.3) In his objection against analyticity, Quine questions whether  
there are composed concepts:

How do we find that ‘bachelor’ is defined as ‘un-  
230 married man’? Who defined it thus, and when? Are  
we to appeal to the nearest dictionary, and accept  
the lexicographer’s formulation as law? Clearly this  
would be to put the cart before the horse. The lex-  
icographer is an empirical scientist, whose business is  
235 the recording of antecedent facts. (Quine 1951, 24)

Quine’s objection is directed at those who are trying to reduce  
necessity and the *a priori* to analyticity and for whom therefore  
the truth of an analytic statement may not be due to something  
contingent. To them he says that they cannot assume that neces-  
240 sity is based on definitions which lexicographers describe, because  
these definitions are contingent. But as we are not looking for an  
empiricist account of the *a priori*, but for the correct account of  
analytic statements, we can happily say that analytic statements

are based on nominal definitions which are contingent linguistic  
245 conventions or rules.

## 5 Synthetic necessity

(5.1) Let me set aside the idea that tautologies are paradigms  
of ‘necessary truths’ and consider what *synthetic modal state-*  
*ments* would be (without focussing on examples like ‘Water is  
250 H<sub>2</sub>O’), i. e. statements which claim that something is possible or  
impossible without claiming that it is consistent or contradictory.  
They could have the following forms:

1. ‘It is possible that  $p$ ’, where the claim is not that  $p$  is con-  
sistent and the statement is not true because  $p$  is consistent.
- 255 2. ‘It is impossible that  $p$ ’, where the claim is not that  $p$  is  
inconsistent and the statement is not true because  $p$  is in-  
consistent.
3. ‘It is necessary that  $p$ ’, where the claim is not that  $p$  is  
a tautology, and the statement is not true because  $p$  is a  
260 tautology.

(5.2) *Why should there be true synthetic modal statements?*  
Human beings have the peculiar ability to have views on some-  
thing, to conceive of things, to construe things in their mind.  
They have concepts under which things that are independent of  
265 human minds may fall. For any set of concepts an existence claim  
can be formed which claims that there is something which falls  
under all of them. For any set of predicates, an existence claim  
can be formed which claims that there is something to which  
they all apply. The source of necessity and possibility lies in the  
270 fact that reality does not allow for the existence of all the sorts of  
things that human beings can construe in their mind. Or rather,

the source of questions about necessity and possibility is that for every description of a thing the question arises whether the existence of such a thing is possible. We can combine predicates with each other arbitrarily and think and talk about a thing to which they all apply. The conventional rules of language do not allow us to say that there is a married bachelor or that there is something which has charge but has no charge, but they do allow us to say without contradiction that there is somebody who is guilty for something he did not do freely, or that something caused something which took place earlier. But it does not follow from the fact that conventional rules of language allow for a certain combination of predicates that there can be an object to which they all apply. It does not follow that the properties to which the predicates refer are in fact combinable.

(5.3) And *even if* all properties were combinable, there would be synthetic modal true statements: those that say for each combination of predicates that the existence of a thing to which they apply is possible.

(5.4) Take a statement of the form ‘Nothing can be A and B’ where the predicates ‘A’ and ‘B’ are semantically independent from each other, i. e. neither is a composed concept of which the other is a part (and ‘A’ and ‘B’ are not synonyms). Neither is ‘A’ used in order to say of something that it is B, nor vice versa. The empiricist will say:

‘There is nothing that is A and B’ is, if true, contingently true. It is false that nothing can be A and B, because it is ‘logically possible’ that something is A and B. It may be naturally impossible that there is something that is A and B, but in the strict and philosophical sense it is possible that there is something that is A and B.

(5.5) You will say this if you take tautologies to be the paradigms

of necessity. However, consider again what one could mean by  
305 asking ‘Could there be something that is A and B?’. If it is true  
that ‘That stone over there is A’ (for example, 0.5 kg in mass),  
then ‘A’ refers to a property of the stone. The property is the  
*object* of ‘A’, as opposed to its meaning.<sup>6</sup> If it is also true that  
‘That shoe over there is A’, then the shoe and the stone share a  
310 property. They resemble each other in a certain respect. Further,  
let ‘B’ refer to a property of a thing.

(5.6) Things like stones and shoes have many properties. As-  
sume that the stone is not only A but also B. In that case it is  
not only true that there is something that is A and B, but it is  
315 also true that it is *possible* that there is something that is A and  
B. This is what I mean by saying that the properties A and B,  
i. e. the objects of ‘A’ and ‘B’, are *combinable*. If you do not like  
this way of speaking about properties, I can express the crucial  
point without it: For any set of predicates, A, B, . . . , which are  
320 semantically independent from each other, not only the question  
arises whether there is something that is A and B . . . , but also  
the question whether the existence of something that is A and B  
. . . is possible.

(5.7) We know that some properties are combinable. Perhaps  
325 *all* properties are combinable, but we have little reason to assume  
that.<sup>7</sup> It seems rather implausible that there could be something  
that has a mass of 1 kg and spin 1/2, or that there could be some-  
thing that has spin 1/2 and is jealous, or, more controversially,

---

<sup>6</sup>The Polish philosopher Kasimir Twardowski (1894) brought out nicely  
the difference between meaning and object.

<sup>7</sup>According to Armstrong’s (1989) ‘combinatorial theory of possibility’ all  
properties are combinable. However, by this he means not that there are  
no truths of the form ‘Nothing can be A and B’, but that all universals are  
combinable. ‘Nothing can be A and B’ is true, for example, if ‘A’ and ‘B’,  
although semantically independent, refer to universals that overlap.

that there could be something that has a charge but no mass.

330 (5.8) So for any two semantically independent predicates, A and B, the question arises whether it is possible that there is something that is A and B. There is a true synthetic modal statement: either there is the synthetic modal truth that the existence of something that is A and B is possible, or there is the synthetic  
335 modal truth that the existence of something that is A and B is impossible. More generally, based on the existential statement ‘There is something that is A and B’ there are modal statements of the following forms:

1. Necessarily, there is something that is A and B.
- 340 2. Necessarily, there is nothing that is A and B. (This means the same as ‘It is impossible that there is something which is A and B’ and ‘Nothing can be A and B’.)
3. Contingently, there is something that is A and B.
4. Contingently, there is nothing that is A and B.
- 345 5. Possibly, there is something that is A and B.
6. Possibly, there is nothing that is A and B.

(I), ‘There is something that is A and B’, entails (5); (II), ‘There is nothing that is A and B’, entails (6). (1) entails (5), (2) entails (6). (3) entails (5), (4) entails (6).

350 (2) entails and, if taken in the modal sense which is relevant here, is entailed by

7. If something is A, then it is not B; and
8. All As are not B.

(5.9) One may want to hold that there are also *necessary pre-*  
355 *dications* which are meaningful, i. e. statements of the form ‘*a* is necessarily F’ or ‘That thing over there is necessarily F’. Whether this is so depends on whether one can make sense of ‘It would be impossible for this very thing to be F’. By ‘*a* is necessarily F’, in the sense in question, it is not meant that there is a contradiction between ‘This is *a*’ and ‘This is not F’ (for example  
360 because the name ‘*a*’ is linked to a sortal, as ‘Nixon’ is linked

to being a man.) In any case, if some statements of the form  
'*a* is necessarily F' are meaningful, then they are equivalent to  
modal existential statements, namely statements of the form 'It  
365 is impossible that there is something which is this very thing and  
not F'. We can therefore hold that all synthetic modal statements  
are, or are equivalent to, modal existential statements.

It is beyond the scope of this article to describe how we acquire  
modal knowledge and when we have justified modal beliefs. I  
370 assume that we know about some possibilities because we know  
that they are realized. If I know of something that is A and B,  
then I know that it is possible that there is something that is A  
and B. Further I assume that our modal intuitions make modal  
beliefs rational. But for the present purposes I do not need to  
375 take views on these matters.

## 6 A construed example of synthetic necessity

(6.1) One may object that it is mysterious how it should be  
impossible that two predicates apply to the same thing although  
the two predicates are semantically independent. I shall now  
380 construe an example of a synthetic necessity claim which can be  
seen to be not mysterious.

Assume there is a causal feature, a property, of a thing which  
affects our senses in two ways, *q* and *r*, or which affects two  
different instruments. By a thing with a certain causal feature  
385 affecting our senses in a certain way, I mean that if our senses  
are exposed to the thing, then the thing causes an impression in  
us, on the basis of which we can form a predicate, say 'P', and  
then rightly claim that the thing is P. (Locke called the concept  
then a 'copy' of the sense impression.) A red thing, for example,  
390 causes an impression of a certain kind in us. In English it is said  
of things that cause such impressions that they are red. Now  
consider the case where one property affects our senses in two

ways. We have two different senses that are affected by this property. To illustrate, the property may be the thing's having  
395 a certain surface such that the property lets the thing cause a visual impression by reflecting light of a certain kind, and it lets the thing affect our sense of touch. The very same feature of the thing affects us in two ways.

(6.2) Two predicates, Q and R, can be formed, based on q  
400 and r. Q and R are conceptually independent from each other: neither is a part of the other. It is not a contradiction to say that there is something which is Q and not R. In this case it is true that *nothing can be Q without being R*. It is impossible that something is Q and not R, because Q and R are based on the  
405 same property (where I use the term 'property' here such that difference of predicates does not entail difference of properties). But 'Something is Q and not R' is not contradictory. Only a statement like 'Something is Q and not Q' or 'Something is Q and N' where it is part of N's nominal definition that something which  
410 is N is not Q, is or entails a contradiction. No rule of language takes one from '*x* is Q' to '*x* is R'. It is a synthetic necessity that something which is Q is also R. If 'Q' were defined such that being Q entails being R, then one could not use the predicate 'Q' to express the discovered fact that something which is Q is, always  
415 and necessarily, also R. So in the scenario described it would be true to say that nothing can be Q without being R, whilst it is not contradictory to say that there is something which is Q and not R. That nothing can be Q without being R is in no sense due to concepts or rules of language. It is a real, synthetic impossibility.

420 There is nothing mysterious about such an impossibility.<sup>8</sup>

(6.3) Note that how *obvious* it is that nothing can be Q without being R depends on how familiar people are with the property to which ‘Q’ and ‘R’ refer. It might be so obvious that Q and R always come together, that it is in fact believed by everybody  
425 that nothing can be Q without being R. It might take just little thought to see that. It may be so obvious that one cannot imagine something being Q and not R. But it could also take quite an effort to see that, or it might even be unknown. There can be unknown necessities. It could be that it is conceivable that  
430 something is Q and not R.<sup>9</sup>

(6.4) However, I see no reason for assuming that *all* necessities rest, as in my example, on a fact that different predicates refer

---

<sup>8</sup>For the example to work, at least one of the predicates, ‘Q’ or ‘R’, must have a meaning like Putnam’s (1975) ‘natural kind terms’. There could be a different property which makes a thing appear q. This property might be such that a thing can have it without having a property in virtue of which it causes r. There could be a thing which causes q but not r. If causing q were sufficient for something being Q, then this thing would be Q but not R. It would be false that *nothing can be Q without being R*. So if my construed example is to work, then the predicate Q must be such that a competent user of ‘Q’ would not want to call something ‘Q’ if, although it causes q and therefore appears to be Q, it causes q in a way quite different from the way usually things cause q. Causing q is not sufficient for something to be Q. A thing is Q only if it is in the relevant respect objectively similar to the things that we usually rightly call Q, as something is water only if it resembles the stuff in our lakes in its chemical structure. If we were to discover in some region of the universe stuff which looks and tastes like water but turns out to be not H<sub>2</sub>O, then we would say that it is not water. Likewise, if we were to discover that something causes q in virtue of having some other property than the one ‘Q’ usually refers to, then we would say that the thing is not Q.

<sup>9</sup>The view that conceivability can ground modal knowledge has also been defended by Gregory (2004). However, Gregory’s discussion is based on the usual concept of broadly logical necessity. Chalmers (2002) develops distinctions between different possible views about conceivability as a ground for modal knowledge.



to the very same causal feature of a thing. There may be other grounds for necessities and impossibilities. Perhaps we are not  
435 even able to describe those grounds. All we know is that some predicates are such that there can be something to which they all apply and, though a bit less obvious, that some predicates are such that there cannot be something to which they all apply. At least we know that for every two predicates that are not defined  
440 in terms of each other the question arises whether there can be something to which they all apply.

## 7 What is the strongest kind of necessity?

(7.1) The common view is that logical necessity is the strongest kind of necessity because logical necessities are a subset of all  
445 other necessities (e. g. Priest 2018, p. 2). Correspondingly, Chalmers (1996, p. 37) argues that everything that is ‘naturally possible’ is also ‘logically possible’, but not everything that is logically possible is also naturally possible: ‘The class of natural possibilities is therefore a subset of the class of logical possibilities’.  
450

(7.2) I reply that logical necessity, in the sense of being tautological, is *not* stronger than synthetic necessity, because nothing that is logically necessary is synthetically necessary, and vice versa. Perhaps it is right to say that the necessity in ‘One cannot be guilty for something one did not do freely’ is stronger  
455 than the necessity in ‘There cannot be two masses which do not attract each other’, which in turn is stronger than the necessity in ‘It is impossible for a man to swim through the Atlantic’. But if there is such a scale of strengths of necessity, logical necessity  
460 is not on this scale, because it is not about whether the world could be as it is described in a certain consistent statement. Logical necessity and synthetic necessity cannot be compared in strength because no tautology is synthetically necessary, and no

synthetically necessary statement is tautological.

465 (7.3) Whether you will say that being tautological is the strongest  
kind of necessity depends on whether you form a concept that  
you call ‘necessity’ and subsume tautologies as well as some true  
synthetic necessity statements under it. My objection against  
this is that such a concept is a very mixed bag, it is too in-  
470 homogeneous. To ask about a statement whether its negation  
is self-contradictory is very different from asking about a state-  
ment whether, although its negation is consistent, it describes  
something possible. Properly speaking, ‘logical necessity’ is not a  
kind of necessity, and ‘logical possibility’ is not a kind of possibil-  
475 ity. We better reserve the term ‘necessity’ for synthetic necessity,  
and the term ‘possibility’ for synthetic possibility. Instead of ‘logi-  
cally necessary’ we can say ‘tautological’; instead of ‘logically  
possible’ we can say ‘consistent’. Consistency is not a kind of  
possibility but a precondition of the truth of modal statements,  
480 as it is a precondition of the truth of any statement.

(7.4) David Chalmers argues against a concept of modality  
that is not reducible to a statement’s being contradictory that a  
believer in such modality ‘must embrace a *modal dualism*, with  
distinct primitive modalities of logical and metaphysical possibil-  
485 ity, neither of which is reducible to the other’ (Chalmers 2002,  
p. 194). But the right way to avoid this dualism is to exclude  
‘logical possibility’ from the concept of possibility, rather than  
assimilating possibility to ‘logical possibility’.

## 8 Examples of modal statements in philosophy

490 There are many areas where we would come to new results  
if we interpreted modal questions not in terms of logical but in  
terms of synthetic modality. Here are four examples.

1. Materialists in the philosophy of mind hold that the mental  
supervenies on the physical, i. e. that there could not be a copy

495 of my body that does not give rise to a mental life as I have it.  
Chalmers (1996, 94–99 and 2002, 195–199) rejects materialism  
because it is *logically possible* that there is a zombie, i. e. a copy  
of my body without mental life: ‘I can discern no contradiction  
in the description [of a zombie]’ (96). If I am right, the argument  
500 has to be reconsidered. The question is not whether a zombie is  
logically possible, but whether it is synthetically possible (as I  
argue in Wachter 2009).

2. There is a further argument for dualism that uses a modal  
premise. Richard Swinburne Swinburne 1997, ch. 8 argues: It is  
505 *logically possible* that I shall continue to exist after my death; if  
that is to be possible I need to have a soul; therefore I have a  
soul. ‘From the mere logical possibility of my continued existence  
there follows the actual fact that there is now more to me than  
my body.’ (Swinburne 1997, 154) The most plausible candidate  
510 for this is a soul: an immaterial part of me which is indivisible,  
which can continue to exist after my bodily death, and which  
is such that it or the compound of it and its body is identical  
to me. It is my soul which makes me in the Last Judgement  
the same person as me today. The crucial premise here is ‘It  
515 is possible that I shall continue to exist after my bodily death’  
(PED). I suggest that it is wrong to interpret PED as the claim  
that ‘I shall exist after my death’ is consistent. Consistency and  
possibility are two different things. The consistency of PED and  
of ‘I shall exist after my death’ is a trivial precondition of the  
520 truth of PED, as it is a trivial precondition of ‘I shall exist after  
my death’ being true. The argument requires PED as a synthetic  
modal statement. We might know PED through thinking about  
it, but if we can, then that is so not because we just have to check  
whether ‘I shall exist after my death’ is consistent but because  
525 in thinking about PED we can derive modal knowledge from our  
experience of what kind of thing we are.

3. J. N. Findlay, in his famous article ‘Can God’s Existence

be Disproved' (1948), proposed a modal argument against the existence of God. If there is a God, then he exists necessarily, because if he merely happened to exist he would not be worthy of worship and he would not be the Lord of everything. But it is logically possible that there is no God. Therefore there is no God. This argument is a consequence of the logical positivists' coup d'etat. The traditional thesis that God exists necessarily (if he exists at all) is rejected also by many theists today because they interpret it in terms of logical necessity, and it is quite obvious that 'God exists' is not logically necessary. They say that God's existence is not logically necessary, but it may be necessary in some weaker sense. If I am right the claim that God exists necessarily is to be interpreted not in terms of logical necessity but in terms of synthetic necessity, which is the only and the strongest kind of necessity.

4. Statements of laws of nature are not tautologies and also not 'logically necessary' in some extended sense. This is often equated with the claim that the laws of nature are contingent. They could be different, or they could even change. The positivists cannot meaningfully ask whether the laws are necessary in the weaker sense, i. e. naturally necessary, because that is defined in terms of 'according to the laws of nature'. If the claim of this article is right, then this wrong approach is wrong. Of course statements of laws of nature are not tautologies, but this does not mean that they are contingent, i. e. that they could be different or that they could change and that the existence of a universe is possible which totally resembles our universe but in which, for example, the gravitational force between bodies is weaker. Whether the laws of nature could be different is a matter of synthetic modality.

We need to liberate ourselves from the legacy of logical positivism and reconsider all those modal questions which are now generally interpreted in terms of 'logical necessity'. Just call tautologies 'tautologies' and not 'necessary', and when you face a

modal question think not about what is consistent but about what is possible.

## References

- Armstrong, David M. (1989). *A Combinatorial Theory of Possibility*. Cambridge UP.
- 565 Bonjour, Laurence (1998). *In Defense of Pure Reason*. Cambridge UP. 232 pp.
- Chalmers, David J. (1996). *The Conscious Mind*. Oxford UP.
- (2002). ‘Does Conceivability Entail Possibility?’ In: *Conceivability and Possibility*. Ed. by Tamar Szabo Gendler and John Hawthorne. Oxford UP, pp. 145–201.
- 570 Findlay, J.N. (1948). ‘Can God’s Existence Be Disproved?’ In: *Mind* 57, pp. 176–183.
- Glock, Hans-Johann (2008). ‘Necessity and Language: In Defence of Conventionalism’. In: *Philosophical Investigations* 31, pp. 24–47.
- 575 Gregory, Dominic (2004). ‘Imagining Possibilities’. In: *Philosophy and Phenomenological Research* 69, pp. 327–348.
- Hildebrand, Dietrich von (1971). *Das Wesen der Liebe*. Regensburg: Habel.
- Ingarden, Roman (1974). *Der Streit um die Existenz der Welt*. 3 vols. Tübingen: Niemeyer.
- 580 Katz, Jerrold J. (1998). ‘The Problem in Twentieth-Century Philosophy’. In: *Journal of Philosophy* 95, pp. 547–575.
- Kripke, Saul (1972). *Naming and Necessity*. Oxford: Blackwell, 1980. 172 pp.
- Lewis, C.I. (1946). *An Analysis of Knowledge and Valuation*. LaSalle, Ill.: Open Court.
- 585 Lotze, Hermann (1874). *Logik: Drei Bücher vom Denken, vom Untersuchen und vom Erkennen (System der Philosophie, erster Teil)*. Leipzig: Meiner.
- Otto, Rudolf (1917). *Das Heilige*. München: Beck.
- Priest, Graham (2018). ‘Metaphysical necessity: a skeptical perspective’. In: *Synthese*, pp. 1–13. DOI: <https://doi.org/10.1007/s11229-018-1885-6>.
- 590 Putnam, Hilary (1975). ‘The meaning of ‘meaning’’. In: *Papers II*, pp. 215–271.
- Quine, W. O. V. (1951). ‘Two Dogmas of Empiricism’. In: *From a Logical Point of View*, pp. 20–46.
- Reinach, Adolf (1913). ‘Die apriorischen Grundlagen des bürgerlichen Rechts’. In: *Sämtliche Werke*. Ed. by Karl Schuhmann and Barry Smith. München: Philosophia Verlag, pp. 141–278.

- Scheler, Max (1916). *Der Formalismus in der Ethik und die materiale Werthetik*. Bern, München: Francke Verlag.
- Schlick, Moritz (1930a). ‘Gibt es ein materiales Apriori?’ In: *Gesammelte Aufsätze: 1926-1936*. Wien: Gerold, pp. 20–30.
- 600 – (1930b). ‘Is There a Factual Apriori? (original: Gibt es ein materiales Apriori?)’ In: *Readings in Philosophical Analysis*. Ed. by H. Feigl and W.S. Sellars. New York: Ridgeview, 1948.
- Sider, Theodore (2003). ‘Reductive Theories of Modality’. In: *The Oxford Handbook of Metaphysics*. Ed. by Michael J. Loux and Dean W. Zimmerman. Oxford UP, pp. 180–208.
- 605 Smith, Barry (1992). ‘An Essay on Material Necessity’. In: *Return of the A Priori*. Ed. by P. Hanson and B. Hunter. Canadian Journal of Philosophy, Supplementary Volume 18.
- 610 Swinburne, Richard (1997). *The Evolution of the Soul*. Revised Edition (first edition 1986). Oxford UP.
- Twardowski, Kasimir (1894). *Zur Lehre vom Inhalt und Gegenstand der Vorstellungen: Eine psychologische Untersuchung*. Wien: Alfred Hölder.
- 615 Wachter, Daniel von (2009). ‘What Kind of Modality Does the Materialist Need for His Supervenience Claim?’ In: *Irreducibly Conscious: Selected Papers on Consciousness*. Ed. by A. Batthyany A. Elitzur. Heidelberg: Universitätsverlag C. Winter, pp. 15–32.
- Zelaniec, Wojciech (1996). *The Recalcitrant Synthetic A Priori*. Lublin: Ar-tom.