Modal Normativism and *De Re* Modality

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Abstract

In the middle of the last century, it was common to explain the notion of necessity in linguistic terms. A necessary truth, it was said, is a sentence whose truth is guaranteed by linguistic rules. Quine famously argued that, on this view, de re modal claims do not make sense. "Porcupettes are porcupines" is necessarily true, but it would be a mistake to say of a particular porcupette that it is necessarily a porcupine, or that it is possibly purple. Linguistic theories of necessity fell out of favour with the publication of Kripke's Naming and Necessity, and Quine's arguments were put aside. In her recent book, Norms and Necessity, Amie Thomasson presents her modal normativism, which is an updated version of the mid-century theories just described. Quine's arguments are thus relevant once again. We recapitulate Quine's central argument, in the context of modal normativism. We then criticise Amie Thomasson's discussion of de re modality. We finish by briefly presenting an alternative account of de re modal statements, which is compatible with modal normativism.

Keywords: Modal normativism, De re modality, Metaphysical modality, Modal scepticism, Quine.

1. Introduction

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Here is a familiar story. In the middle of the last century, when people still wore bowler hats and radios had knobs, it was commonly thought that necessity arises (in a sense that no doubt requires clarification) from linguistic conventions. ¹ The necessity of the sentence "All porcupettes are porcupines" is a product of certain linguistic conventions, including most obviously the convention that "porcupette" means baby porcupine. And the same goes for other necessarily true sen-

There was at the time a debate about the coherence of *de re* modal claims. Quine argued—to put it roughly—that modality is a linguistic matter, and so it is linguistic items only that have modal properties. On this view, it is muddled to attribute modal properties to non-linguistic things. "All porcupettes are porcupines"

¹ We have in mind what is now called *metaphysical* necessity. Thomasson (2020: ch. 1) describes the history of these ideas; see also Thomasson 2009.

is necessary, but it would be confused to say that Pachi, Percy, or Sassafrass has the property of *being necessarily a porcupine*, or *being possibly famous*. Others, while accepting the premise that necessity arises from linguistic conventions, argued that even so, *de re* modal claims make sense. This complex debate ostensibly came to an end with the publication of Kripke's *Naming and Necessity* (1980), which convinced the majority that the shared presumption that necessity arises from linguistic convention was mistaken, which made Quine's arguments moot. Aside from some Monday morning quarterbacking, this particular debate about *de re* modality fizzled.²

In her recent book, *Norms and Necessity* (2020), Amie Thomasson presents a theory of modality, modal normativism, that is recognizably and avowedly an updated version of the mid-century theories just mentioned. According to Thomasson—to put it roughly for now—when one says "Necessarily, φ ", one conveys that φ 's truth is a consequence of semantic rules. This makes Quine's arguments about *de re* modality relevant once again. Thomasson herself takes an anti-Quinean line, arguing that *de re* modal claims *are* coherent. In this paper, we will critique Thomasson's discussion of the issue, and propose an alternative approach.

2. Modal Normativism

We sometimes use modal terms when describing the rules of games. We say that something *must* be true if the rules of the game require it, or that something *may* be true if the rules of the game permit it. Consider the rules of *Bananagrams*:

- 1. Place all 144 tiles face down on the center of table. These tiles are referred to as the "BUNCH". For games of 2–4 people, each player takes 21 letters from the bunch, keeping them face down [...]
- 2. Any one player says "SPLIT" whereupon all players turn their own tiles face up and proceed to form their OWN collection of connecting and intersecting words. The words may be horizontal or vertical, reading left to right or top to bottom. Each player may rearrange [their] own words as often as desired. Players DO NOT take turns, but play independently of each other and at the same time.
- 3. When a player has none of [their] original letters left, that player says "PEEL" and takes a tile from the BUNCH. At this point ALL OF THE OTHER PLAYERS MUST ALSO TAKE A TILE FROM THE BUNCH and add it to their collection of letters.
- 4. At any time and as often as desired during play, any player may return a difficult-to-use letter back to the center of the BUNCH, face down, but MUST TAKE THREE LETTERS IN RETURN. The player must declare this action to the others by saying "DUMP". This exchange does not affect the other players.
- 5. Play continues until there are fewer tiles in the BUNCH than there are players. The first player with no remaining letters shouts "BANANAS!!!" and is the winner of that hand (Bananagrams 2021).

² See "Reference and Modality" in Quine 1953/1980. Burgess 1997 is an excellent analysis of the debate around Quine's argument. It is true that Quine had *other* qualms about modality, but in this paper we discuss only the specific issue of *de re* modality.

³ Modal normativism can be viewed as a continuation of metaphysical views that Thomasson has defended at length in earlier works, including Thomasson 2007 and Thomasson 2015.

Some of these rules are stated as imperatives (e.g. "Place all 144 tiles face down on the center of table"). This way of presenting rules is limited, however. An imperative sentence cannot properly be used as the antecedent to a conditional, for example, which can be inconvenient. What is more, while imperatives can be used to present obligations, they cannot be used to present permissions. So it is often helpful to present rules using modal verbs such as "must" and "may":

At any time and as often as desired during play, any player *may* return a difficult-to-use letter back to the center of the BUNCH, face down, but *MUST* TAKE THREE LETTERS IN RETURN (Bananagrams 2021, emphasis added).

Thomasson argues that modals are sometimes used in a similar way to express *semantic* rules. For example, it is a rule that the word "porcupette" is to be applied only where the term "porcupine" applies; one can express one's commitment to this rule using the sentence, "Necessarily, porcupettes are porcupines". One might do this when teaching someone how to use the word "porcupette", or when correcting someone's incorrect usage of the term. ⁴ In a similar way, one can use the word "possibly" and its cognates to convey that a certain statement is *not* ruled out by the semantic rules one accepts. For example, one might say, "Purple porcupettes are possible" to indicate that (whatever the laws of biology do or do not allow) none of our semantic rules preclude the application of "purple" to porcupettes. ⁵

It is a familiar point that we can talk of many different species of modality: deontic, metaphysical, physical, and so on. Let us call the species of modality just described *semantic modality*. The main thesis of Thomasson's book can then be easily expressed: her claim is that *metaphysical modality is semantic modality*. Thomasson summarizes her view in the following passage, emphasizing its value for epistemology:

[...] modal questions do not require a special form of philosophical insight or intuition into features of reality for their resolution. For properly understood, modal terms do not function to describe or track special modal features of reality that we must discover to render our verdict. Instead, they serve as perspicuous ways of mandating or enforcing, reasoning with, and renegotiating rules. Speakers who master the relevant terms or concepts are in a position to acquire modal knowledge, given their conceptual and reasoning abilities and (in some cases) knowledge of empirical facts. We require no form of special philosophical insight to undertake modal metaphysics, and we can see the work of the metaphysician as primarily on the conceptual side—not as discerning what the "essential" or "modal" features of

⁴ In Thomasson 2013, Thomasson says that following the rules is *constitutive* of playing a game or using language; she backs off this claim in Thomasson 2020: 73.

⁵ Thomasson (2020: 84-85) is explicit that "possibly" is used to express permissions "by making evident what is not ruled out by the requirements", and that it is interdefinable in the usual way with "necessarily". It is not clear whether there are any (non-derived) semantic rules that express permissions rather than requirements.

⁶ We should stress that "metaphysical modality is semantic modality" is *our* way of stating Thomasson's view. Thomasson herself does not use the phrase "semantic modality". Thomasson says that she hopes to understand "metaphysical modality in terms of deontic modality"—by which she means that means that sentences about what is metaphysically necessary or possible are to be understood as expressing one's commitments to linguistic norms.

reality are, but rather as expressing semantic or conceptual rules and their consequences in the object language, under conditions of semantic descent—or implicitly advocating for changes in the rules (Thomasson 2020: 6).

3. Clarifications

3.1 Object-Language and Meta-Language

Thomasson would describe "Porcupettes are porcupines" as an "object-language expression" of a semantic rule. We think that in saying this Thomasson does not mean to assume a strict division between object- and meta-language, of the kind that one finds in mathematical logic. Rather, her point is that in the sentence "Necessarily, porcupettes are porcupines", the word "porcupette" is *used* rather than *mentioned*.

What does it mean to say that "Porcupettes are porcupines" is an *expression* of the rule that the word "porcupette" is to be applied only where the term "porcupine" applies? We suggest that, to a first approximation, this means that the sentence could be used by someone to manifest their understanding of the rule, and to impart that understanding to someone else.

It seems that a sentence could be an "object-language expression" of a semantic rule even if someone could understand the rule without recognising the sentence as an expression of it. A child, for example, might exhibit in particular cases an understanding of the rule associated with the phrase "prime number", but struggle to understand the definition of this phrase, written out in the style of a professional mathematician.

3.2 Logical Consequence

Suppose that in my language the words "even" and "odd" are governed by the following two rules, respectively:

Apply the term "even" to all and only those integers which are divisible by two without remainder.

Apply the term "odd" to all and only those integers which are not divisible by two without remainder.

In this case, there is no *single* semantic rule which forbids applying "even" and "odd" to the same integer. Nevertheless, we will presumably endorse the claim, "Necessarily, no integer is both even and odd". Thomasson therefore holds that "Necessarily, ϕ " conveys that ϕ is "an object-language expression of an actual semantic rule (*or a logical consequence of actual semantic rules*)" (2020: 125, emphasis added).

This leaves us with the tricky question of what it means to say that something is a "logical consequence" of semantic rules. If rules are construed as imperatives, this introduces the notoriously thorny question of what it means to say that an inference involving imperatives is "valid". A further question is whether we can characterise the relevant notion of validity without appeal to the very modal notions we are trying to explicate. This issue will reappear later in the paper.

 $^{^{7}}$ See Fillion and Lynn 2021 and Parsons 2013 for philosophical discussion of the logic of imperatives.

3.3 Metaphysical, Physical, Logical

To repeat, the central claim in Thomasson's book is that *metaphysical modality is* semantic modality. It is perhaps worth emphasizing that Thomasson is cautious in her claims about other species of modality.

When one says that any two negatively charged particles *must* repel one another, or that powerplants based on nuclear fusion are *possible*, one is not expressing one's linguistic commitments. In her discussion of such claims about physical or nomological modality, Thomasson *suggests* a view on which physical laws "reflect norms of reasoning on the basis of empirical evidence" (2020: 121), but she does not commit herself to this suggestion.

Thomasson discusses logical modality briefly. She rejects what she calls a "heavyweight" conception of logical modality (2020: section 5.3), and favors an "inferentialist" approach instead. We think this means that Thomasson prefers a broadly syntactic, or proof-theoretic conception of logical consequence—we will return to this question.⁸

3.4 Expressing Norms vs. Describing Norms

Here is an objection to Thomasson's modal normativism. For Thomasson (or so the objection goes), the following two sentences are equivalent:

- (1) Necessarily, porcupettes are porcupines.
- (2) The rules of my language require that the term "porcupette" only be applied where the term "porcupine" applies.

But (the objection goes on) this cannot be correct: (1) is a necessary truth, ⁹ but (2) is a contingent truth, because the rules of my language could have been different. Since (1) is necessary and (2) is contingent, they cannot be equivalent in the way Thomasson claims.

This objection misunderstands Thomasson's view. She does not claim that (1) and (2) mean the same thing. One the contrary, sentence (2) is a *description* of the rules of my language. With sentence (1), on the other hand, I *express my commitment* to certain norms; I don't *describe* those norms (Thomasson 2020: section 1.4).

3.5 Use, Function, Meaning

So far, we have been describing Thomasson's account of the *use* or *function* of modal talk. There is, of course, a further question about what modal words *mean*. Thomasson adopts an inferentialist theory of the meaning of modal language, and gives introduction and elimination rules for "necessarily":

⁸ Thomasson approvingly cites inferentialist views of logical consequence, as articulated in Restall 2005 and Ripley 2013. It is an interesting question whether such inferentialist approaches can be extended to cover imperatives.
⁹ That (1) is a necessary truth (if it is true at all) is a consequence of the S4 axiom:

That (1) is a necessary truth (if it is true at all) is a consequence of the S4 axiom: $(\Box p \to \Box \Box p)$. That the S4 axiom is valid for metaphysical necessity is not wholly uncontroversial: see Chandler 1976 and Salmon 1989. Thomasson herself does not challenge this assumption, however.

I: If p is an object-language expression of an actual semantic rule (or a logical consequence of actual semantic rules), then you are entitled to introduce: *Necessarily p*, regardless of any subjunctive suppositions. 10

E: If you have *Necessarily p* as a premise, you may use p as a premise in your reasoning anywhere, under any subjunctive suppositions (Thomasson 2020: 83-84).

Thomasson does not describe her view as "conventionalist" or "non-cognitivist". She characterizes her view as "simple realism", for the existence of modal *entities* like modal propositions are justified by trivial inferences from uncontroversial truths. ¹¹ She writes:

[T]he normativist position, as I see it, is one in which we get a straightforward first-order realism about modal properties and facts.

But it is not a realism that takes modal facts and properties as *explanatorily* basic, treating modal truths as descriptions made true by modal facts or properties, and modal knowledge as being derived from detecting these modal features. Instead we work the other way up: we begin by understanding the function of modal discourse, use that to build an account of the meaning of 'necessity' (in terms of its inferential and epistemic role), use that (combined with a deflationary approach to truth and ontology) to account for modal truth, and explain our talk of modal facts and properties in terms of hypostatizations from necessary truths (Thomasson 2015: 151).

4. Kripkean Problem Cases

In *Naming and Necessity* (1980), Kripke argued that some truths are *a priori* and yet contingent, while others are *a posteriori* and yet necessary. Some of Kripke's examples appear to be counterexamples to modal normativism. In this section, we will introduce the problem of the contingent *a priori*, and describe Thomasson's solution. *A posteriori* necessities will be discussed in section 5.

Here is a broadly Kripkean example of the contingent *a priori*. ¹² Suppose it to be a rule that "Jo" refers, rigidly, to the first person to summit Everest. "Jo was the first person to summit Everest (if anyone was)" is then *a priori*. However, it is also contingent, for Jo could have chosen a safer hobby, and never gone near Everest. This might appear to be a counterexample to Thomasson's theory: "Jo was the first person to summit Everest (if anyone was)" is a consequence of semantic rules, but it is not necessary.

Thomasson's response begins with the observation that there are *conditional* rules. Let us look at a non-semantic example first. Suppose that the owner of the café says to an employee, "If Ashni comes in, give her a cup of tea on the house". Then if Ashni does indeed enter the café, the rule comes into force and the employee is required to give her a cup of tea on the house. If Ashni does not enter the café, the rule does not come into force and no obligation is created. In such cases, we might distinguish the rule's *condition* from its *content:*

¹⁰ This formulation differs from the formulation in Thomasson 2013 only in replacing "constitutive semantic rule" with "actual semantic rule".

¹¹ See Thomasson 2020: 90; 2015: ch. 3.

¹² The example is inspired by Evans' (1979) well-known discussion of the name "Julius". The example bears some similarity to Kripke's discussion of "metre", for which see Kripke 1980: 54-56 and Thomasson 2020: section 4.4.

- Condition: Ashni enters the café.
- Content: Ashni is to be given a cup of tea on the house.¹³

Conditional rules can also be schematic. For example, our café owner might say, "If any customer pays with a credit card, charge them an extra 10%". This conditional rule might be written out in the following way:

- Condition: x is a customer who pays by credit card.
- Content: x is to be charged an additional 10%.

In such cases, we say that the conditional rule has *instances*. For example, the following is an instance of the rule just mentioned:

- Condition: Chantal is a customer who pays by credit card.
- Content: Chantal is to be charged an additional 10%.

Now back to our mountain climber. Thomasson would say that the semantic rule in this example is conditional:

- Condition: x was the first person to climb Everest.
- Content: The name "Jo" may be applied to x.14

In light of such rules, Thomasson's account of metaphysical necessity can be slightly refined:

When one says "Necessarily, ϕ ", one conveys that ϕ is an object-language expression of (an instance of) an unconditional semantic rule, or the content of (an instance of) a conditional semantic rule whose condition is true, or a logical consequence of some combination of these.

Refined in this way, Thomasson's account no longer implies that the sentence about Jo is necessary, and the counterexample is defused.

We believe this to be an elegant account of this example. Necessary *a posteriori* truths are, however, more challenging.

5. Identity and De Re Modality

Let us consider Thomasson's treatment of *de re* modality. Following Dummett (1973/1981), Geach (1962), and others, Thomasson believes that every proper

¹³ Thomasson does not exactly format her rules in this way. Instead, she uses parentheticals to specify the empirical condition, as in: (If Ashni enters the café, then) Ashni is to be given a cup of tea on the house. We find the formatting where conditions and contents are listed separately easier to read. Thomasson (2020: 95, fn4) acknowledges that Sidelle's (1989) conventionalism, which makes similar moves, is an important precursor to modal normativism.

¹⁴ Some readers will perhaps suggest two-dimensional semantics as a way of modelling rules like this (Schroeter 2021). We think, however, that it would be problematic for Thomasson to appeal to two-dimensional semantics *at this stage in the discussion*. Two-dimensionalists use possible worlds in their semantic theory. This means that two-dimensional semantics is available only when the notion of a "possible world" has already been adequately explained. The modal normativist wishes to explicate modal notions by appeal to semantic rules; it would be circular to explain the semantic rules in turn using modal notions. Thomasson herself recognizes this point in a footnote (2020: 94, fn3). This is not to say that modal normativism is incompatible with two-dimensional semantics. Rather, the claim is that the modal normativist must have some account of semantic rules that does not assume modal notions.

name is associated with a sortal term.¹⁵ Suppose for example that one morning an expert ornithologist (who is incidentally also a renowned logician) sees a sooty grouse, and introduces the name "Annie" with the stipulation that it refer to *that grouse*. The name "Annie" is then associated with the sortal term "grouse". To be more specific, it is now a semantic rule that the word "Annie" should not be applied to anything that is not a grouse. Now "grouse", being a sortal term, is associated with "application conditions" (i.e. rules specifying when something may be labelled "grouse") and "co-application conditions" (i.e. identity conditions: rules specifying what it is for grouse x and grouse y to be *the very same grouse*).

This system of rules can be expressed using modal statements involving the name "Annie". For example, we have:

Annie is necessarily a grouse.

If it is part of the application conditions for "grouse" that the predicate should only be applied to animals, we also have:

Annie is necessarily an animal.

If it is part of the co-application conditions for "grouse" that one grouse cannot be in two places at once, we have:

It is not possible for Annie to be in two places at once.

However, no linguistic rule forbids us from applying the name "Annie" to a purple thing; hence:

Annie could have been purple.

We are now in a position to say that Annie has modal properties: Annie is necessarily a grouse but possibly purple. In this way, Thomasson seeks to explain *de re* modality within the modal normativist theory.

But there are problems with this approach. Suppose that on some later day, our ornithologist-cum-logician sees a bird in the distance. They can see clearly enough that it is a bird, but they are unable to ascertain the species. Perhaps it is a grouse; perhaps it is a pheasant. The ornithologist introduces the name "Bennie", stipulating that it is to refer to *that bird*.

Now the ornithologist does not know this, but in fact Annie is Bennie. (Did you see that twist coming?) Consider the identity statement:

Annie = Bennie

Is this identity statement an object-language expression of a semantic rule, or of some a logical consequence of some semantic rules? There is a strong case to be made for a negative answer to this question. In the story, the ornithologist is fully apprised of all the relevant semantic rules, and is a talented logician. However, they have no way of knowing that the identity statement is true. The identity statement is not, one might infer, an expression of a semantic rule, or a logical consequence of semantic rules.

If this line of thought is correct, modal normativism implies that we should reject the statement "Necessarily, Annie is Bennie", which is contrary to the received wisdom among metaphysicians and students of modal logic.

And it gets worse. Consider the following sentences:

(3) Necessarily, Annie is a grouse.

¹⁵ This view was articulated and independently motivated in Thomasson 2007: section 2.3. The application and co-application conditions admit of vagueness, as should be expected.

(4) Necessarily, Bennie is a grouse.

It seems that, as modal normativists, we should endorse (3): the name "Annie" was after all introduced with the stipulation that it refer to a grouse. What about (4)? Our ornithologist is not in a position to know that Bennie is a grouse, even though they are fully appraised of all the relevant semantic rules, and are logically competent. So it would seem to be consistent with the semantic rules that Bennie not be a grouse, and so (4) should be rejected, it seems.

This has a number of puzzling consequences. First, the modal normativist is now apparently forced to deny that the law of the substitutivity of identicals is applicable in modal contexts. If Quine is right, this in turn implies that it does not make sense to "quantify in" to modal contexts (Quine 1953/1980). Second, the modal normativist is apparently stuck with the conclusion that an object *in itself, independently of how it is labelled,* can have modal properties. *Qua Annie*, our bird is necessarily a grouse; *qua Bennie*, the bird is not necessarily a grouse. On this view, it seems, it is primarily the *names* that have modal properties; the bird itself has modal properties only derivatively.

6. Thomasson's Response

Thomasson responds to such cases by describing a new semantic rule, as follows:

Where a = b, any name "a" that properly applies to a may be applied to b (Thomasson 2020: 110).

Let us call this the "Identity Rule". Since this is crucial to the argument in the remainder of the paper, we hope that a certain amount of pedantry will be permitted. The Identity Rule is conditional, so let us explicitly separate the condition and the content:

- Condition: a = b
- Content: Any name "a" that properly applies to a may be applied to b.

Our first point is that it is hard to know what to make of this expression: any name "a". It looks like a quantifier introducing a new bound variable (as in " $\forall x$ ")—but the symbol "a" has *already occurred in the condition*. We suspect that this is a slip, and that the underlined "a" can be removed:

- Condition: a = b
- Content: Any name that properly applies to a may be applied to b.

Second, Thomasson might appear to be distinguishing cases in which a name "may be applied" to an object from cases in which a name "properly applies" to an object. But no explanation of this distinction is given. We suspect therefore that this is a case of "elegant variation", and the Identity Rule may be rewritten:

- Condition: a = b
- Content: Any name that may be applied to a may be applied to b.

Enough pedantry. Now let us put the Identity Rule to work. Following Thomasson's discussion (of a slightly different example), we argue as follows. First, we note that the following is an instance of the Identity Rule:

- Condition: Annie = Bennie
- Content: Any name that may be applied to Annie may be applied to Bennie.

As a matter of empirical fact, the condition obtains, and the following rule comes into force:

Any name that may be applied to Annie may be applied to Bennie.

As an instance of this universal generalization, we have:

If "Annie" may be applied to Annie, "Annie" may be applied to Bennie.

Presumably it is a consequence of semantic rules that "Annie" may be applied to Annie, so we have:

"Annie" may be applied to Bennie.

The object-language expression of this rule is then:

Annie = Bennie.

This identity statement has now been shown to be an object-language expression of a logical consequence of semantic rules, so we have:

Necessarily, Annie = Bennie.

And we can go further. Here is another instance of the Identity Rule:

- Condition: Bennie = Annie
- Content: Any name that may be applied to Bennie may be applied to Annie.

Since this condition of this rule does in fact obtain, the rule comes into force, and we have:

Any name that may be applied to Bennie may be applied to Annie.

Now recall that we have the following rule for the proper use of the name "Annie":

The name "Annie" may only be applied to a grouse.

This gives us:

The name "Bennie" may only be applied to a grouse.

The object-language expression of this rule is:

Bennie is a grouse.

We have now shown that this sentence is the object-language expression of a logical consequence of semantic rules, so we have:

Necessarily, Bennie is a grouse.

We are now in a position to endorse the orthodox view, that true identity statements are necessary. We are also able to say that the bird *however it is named* is necessarily a grouse—and so our claim to have accommodated *de re* modality is restored.

7. A Further Problem

Back at the café, the owner is giving the staff instructions about who can be given free buns. They begin:

- Any customer aged over sixty-five may be given a free bun.
- Any uniformed member of the armed services may be given a free bun.
- Any customer who comes to the café more than three times a week may be given a free bun.

The café owner then presents the following additional rule:

• If x = y, and if x may be given a free bun, then y may be given a free bun.

The baristas are perplexed by this addition, and ask for clarification. The owner explains:

Well suppose that Ashni *is* Ms. Shah. Then if one of the previous rules permits you to give a free bun to Ashni, this last rule tells you that you may also give a free bun to Ms. Shah.

The baristas remain puzzled. If Ashni is Ms. Shah, then giving a free bun to Ashni *just is* giving a free bun to Ms. Shah—so *of course,* if one is permitted to give Ashni a free bun, one is also permitted to give Ms. Shah a free bun. The rule is a *triviality:* it does not change what one is permitted or forbidden to do in the slightest.

Our sympathies here are with the baristas. This café owner's rule (if it makes sense at all) is a triviality, which makes no difference to the baristas' obligations and permissions. We think that the Identity Rule is puzzling in a rather similar way:

- Condition: a = b
- Content: Any name that may be applied to a may be applied to b.

To a first approximation, our concern is this. If a = b, applying a name to a *just is* applying that name to b—so *of course* any name that may be applied to a may be applied to b. The rule seems to be, like that of the café owner, *trivial*.

But the case is rather more complicated than this suggests, for it is open to Thomasson to reply that the rule is *not* trivial, for it has implications for the proper use of modal words: it allows us to endorse "Necessarily, Annie is Bennie" and "Bennie is necessarily a grouse"—sentences which we would otherwise reject.

Indeed: we grant that the rule is not trivial. But we remain puzzled. As far as we can see, this rule makes a difference *only* to our modal talk. So what is the point of the rule? Perhaps it will be suggested that the rule somehow *clarifies* our modal talk; but this is at best doubtful. Recall that "Annie" is associated with the sortal "grouse" while "Bennie" is associated with the sortal "bird". Assuming modal normativism, one would think it would be desirable to be able to express this difference between the two names by saying "Annie *must be* a grouse, but Bennie *could be* a bird of another species". Thomasson's Identity Rule precludes this. It thus seems to make it *harder* to express the rules of our language. The rule just gets in the way. So, again, what is the point of the Identity Rule?

8. A New Approach

We suspect that to make progress on this issue, we will have to get a better handle on the fundamental question of how rules are individuated. To see the issue, suppose that our café owner issues the following two commands on two different occasions, and assume that Ashni is Ms. Shah:

- (5) "Give Ashni a free bun whenever she comes in".
- (6) "Give Ms. Shah a free bun whenever she comes in".

Should we think rules in a "fine-grained" way, and say that (5) and (6) are different rules? Or should we think of rules in a "coarse-grained" way, and say that (5) and (6) are two different formulations of the same rule?

One—appealingly simple—view is that *rules are sentences*. On this view, (5) and (6) are obviously different rules.

Alternatively, one might argue that (5) and (6) express the same rule by pointing out that, at all possible worlds, and at all times, and in all places, (5) and (6)

require the same actions. ¹⁶ Necessarily, one acts in a manner consistent with rule (5) if and only if one acts in a manner consistent with rule (6). One might develop this suggestion by claiming that a rule is a class of all actual and possible actions consistent with the rule. On this view, one might say, a rule C is a consequence of a rule P just in case, necessarily, anyone who acts in a manner consistent with rule P also acts in a manner consistent with rule C.¹⁷

What should the modal normativist say about this issue? We think that the coarse-grained, modal theory of rules just described has many virtues, but it is unlikely to appeal to the modal normativist. The modal normativist seeks to explicate modal notions by appeal to semantic rules; if semantic rules are themselves understood in modal terms, the account is objectionably circular. Hence, the modal normativist is likely to prefer the fine-grained view, on which rules are sentences. This approach has its own problems, however, as we will now explain.

From a modal normativist point of view, what are the rules associated with a proper name such as "George Orwell"? In her discussion of this issue, Thomasson emphasizes the point that each name is associated with a sortal term: in our example, presumably, "person". ¹⁹ For Thomasson, the name "George Orwell" is associated with the following rule:

The name "George Orwell" is only to be applied to a person.

The term "person" is associated with application conditions and co-applications conditions, and these perhaps create further rules associated with the name "George Orwell". If, for example, the application conditions for "person" include that the term should only applied to animals, we have the following rule:

The name "George Orwell" is only to be applied to an animal.

This cannot be the whole story, however. The rules we have so far mentioned are the same for *all* person-names. But surely there must be a rule associated with the name "George Orwell" which picks out *one* person in particular. Descriptivists would argue that there is a semantic rule to the effect that the name "George Orwell" refers to whoever satisfies some description—"the author of *Animal Farm*", perhaps. However, Kripke (1980) argued forcefully that there is no such uniquely

¹⁶ Note that Thomasson (2020: 135-37) follows Steinberg 2013 in adopting a "pleonastic" theory of possible worlds, which allows the existence of possible worlds to follow from "easy" arguments.

¹⁷ Parsons (2013) and Fillion and Lynn (2021) develop modal accounts of imperatives rather like this, though more sophisticated.

¹⁸ Here is an example, to show that the circularity here is genuinely problematic. Suppose that the word "Bennie" is governed by the following rule:

[&]quot;Bennie" may be applied to *that bird*, and "Bennie" may not be applied to anything else. Now suppose we ask whether Bennie is necessarily brown. Assuming modal normativism, this amounts to asking whether the semantic rules permit us to apply the name "Bennie" to something that is not brown. That is, does the rule just mentioned entail the that the name "Bennie" is to be applied only to a brown thing? Given the proposed modal conception of rules, that amounts to asking whether, necessarily, if a person applies the word "Bennie" only to *that bird*, then they only apply the word "Bennie" to a brown thing. But it is impossible to answer this question unless we already know whether *that bird* could have been brown—which is a variation of the question we started with. Thus, if we adopt a modal conception of rules together with modal normativism, the question "Is Bennie necessarily brown?" cannot be answered—which is an intolerable place to end up.

19 See Thomasson 2007: sections 2.3 and 4.1.

identifying description, and Thomasson (while she disagrees with Kripke about many things) does not seem to disagree on this point. Once this descriptivist view has been rejected, the obvious alternative is that the rule in question associates the name "George Orwell" with a certain person, independently of any particular mode of presentation of that person. The rule, so to speak, reaches out and grabs the very object itself.

How is this rule to be stated? We do not speak a Lagadonian language, in which George Orwell himself can appear in a sentence. To state the rule, we must identify the person using some linguistic expression that refers to him. This might be a demonstrative, a name, or even a description (used with care, so as not to backslide into descriptivism):

- (7) Apply the name "George Orwell" only to that person.
- (8) Apply the name "George Orwell" only to Eric Blair.
- (9) One and only one person wrote *Animal Farm*. Apply the name "George Orwell" only to him.

Thus, even if the rule in question is independent of any mode of presentation, we need to use *some* mode of presentation in order to *state* the rule.

If this line of thought is correct, the modal normativist must regard (7), (8) and (9) as three different formulations of a single rule—but this suggests a coarse-grained conception of rules after all. We find this argument compelling, and hence think that the modal normativist must take a coarse-grained view. The challenge is to develop a version of the coarse-grained approach that does not presuppose some antecedent understanding of modality.

From Thomasson's point of view, the question that we have been discussing is really a question about the *co-application conditions* for the sortal "rule": In what cases should two different sentences be regarded as variant expressions of one rule, and in what cases should they be regarded as expressions of two different rules? We will not offer a complete answer to this challenging question, ²⁰ but we do wish to suggest that the following should be one component of the co-application conditions for "rule":

Given sentences x and y each of which expresses a rule, x and y are expressions of the same rule if the two sentences are synonymous except perhaps in that they use different modes of presentation of the same object.

This immediately implies that (5) and (6) are expressions of the same rule, and that (7), (8) and (9) are expressions of the same rule.

And how are we to explain the requisite notion of consequence? As we said in section 3.3, from Thomasson's point of view the most attractive approach is syntactic. However, we must accommodate the point that one and the same rule can be expressed in many ways. This suggests:

Rule B is a consequence of rules $A_1, ..., A_n$ just in case there are sentences B', $A'_1, ..., A'_n$ where:

- B', A'_1 , ..., A'_n express the rules B, A_1 , ..., A_n respectively.
- There is a proof of B' whose premises are all among A'_1, \ldots, A'_n .

²⁰ Another challenging issue to be discussed is whether one can have distinct but logically equivalent rules. Happily, we need not settle the issue here. We are also happy that we need not discuss the application conditions.

We are now, at last, ready to present our proposed solution to the Annie/Bennie problem.

In brief, the idea is this. A rule associated with the word "Annie" is that it refers to a certain grouse. A rule associated with the name "Bennie" is that it refers to that same grouse. It is a consequence of these two rules that the names co-refer. Now it is true that our ornithologist knows these two rules in such a way that they are unable to figure out that the rules have this consequence, but the rules *do* have this consequence even so. Something can be a consequence of semantic rules, even if this consequence relation cannot be recognized *a priori*. Let us go through this in more detail.

According to the current proposal, one of the rules associated with the name "Annie" is that it may be applied to a certain grouse, and nothing else. This rule can be presented in different ways, but one of these presentations is:

The name "Annie" may be applied to Bennie, and may not be applied to anything else.

Our ornithologist would be unable to recognize this as a correct expression of the rule, but it *is* a correct expression of the rule even so. Anyway, we have as an object-language expression of this rule:

Annie = Bennie.

Since this identity statement is an object-language expression of a semantic rule, we have:

Necessarily, Annie = Bennie.

And we can go further. One of the rules associated with the name "Bennie" can be written in this way:

The name "Bennie" may be applied to Bennie, and may not be applied to anything else.

(In most contexts this way of expressing the rule would be rather unhelpful, but this does not mean that it is not an expression of the rule!) Now this rule, together with the above rule for the name "Annie", together entail:

The name "Bennie" may only be applied to a thing to which "Annie" may be applied.

But we have the following rule for "Annie":

The name "Annie" may only be applied to a grouse.

Hence:

The name "Bennie" may only be applied to a grouse.

In the object language, this rule can be expressed thus:

Necessarily, Bennie is a grouse.

This undermines the argument, given in section 5, for the claim that the substitutivity of identicals fails in modal contexts.

9. Conclusion

We do not pretend that this is a complete solution to Quine's challenge. Many questions remain open:

• What are the application conditions for the sortal "rule"?

- What are the co-application conditions for the sortal "rule"?
- What are the rules of inference for the logic of imperatives?
- Does the approach described work in *all* cases?

We do hope to have persuaded the reader that this is a promising avenue for further work, and that the modal normativist may yet be able to accommodate *de re* modality.

References

Bananagrams Inc. 2021, Banagrams, Providence.

Burgess, J. 1997, "Quinus ab Omni Nævo Vindicatus", *Canadian Journal of Philosophy*, 27, suppl. 1, 25-65.

Chandler, H. 1976, "Plantinga and the Contingently Possible", Analysis, 36, 2, 106-109.

Dummett, M. 1973/1981, *Frege: Philosophy of Language*, 1st ed., New York: Harper and Row. 2nd ed., Cambridge: Harvard University Press.

Evans, G. 1979, "Reference and Contingency", The Monist, 62, 2, 161-89.

Fillion, N. and Lynn, M. 2021, "The Content and Logic of Imperatives", *Axiomathes*, 31, 3, 419-36.

Geach, P. 1962, Reference and Generality: An Examination of Some Medieval and Modern Theories, Ithaca: Cornell University Press.

Kripke, S. 1980, Naming and Necessity, Cambridge: Harvard University Press.

Parsons, J. 2013, "Command and Consequence", Philosophical Studies, 164, 1, 61-92.

Quine, W.V.O. 1953/1980, From a Logical Point of View, Cambridge: Harvard University Press. Revised edition, Cambridge: Harvard University Press.

Restall, G. 2005, "Multiple Conclusions", in Hájek, P., Valdés-Villanueva, L., and Westerståhl, D. (eds.), *Logic, Methodology and Philosophy of Science: Proceedings of the Twelfth International Congress*, London: KCL Publications.

Ripley, D. 2013, "Paradoxes and Failures of Cut", *Australasian Journal of Philosophy*, 91, 1, 139-64.

Salmon, N. 1989, "The Logic of What Might Have Been", *The Philosophical Review*, 98, 1, 3-34.

Schroeter, L. 2021, "Two-Dimensional Semantics", in Zalta, E. (ed.), *The Stanford Encyclopedia of Philosophy*, Fall 2021 Edition.

Sidelle, A. 1989, *Necessity, Essence and Individuation: A Defense of Conventionalism*, Ithaca: Cornell University Press.

Steinberg, A. 2013, "Pleonastic Possible Worlds", Philosophical Studies, 1664, 767-89.

Thomasson, A. 2007, Ordinary Objects, Oxford: Oxford University Press.

Thomasson, A. 2009, "Non-Descriptivism About Modality: A Brief History and Revival", *Baltic International Yearbook of Cognition, Logic and Communication*, 4, 1-26.

Thomasson, A. 2013, "Norms and Necessity", *The Southern Journal of Philosophy*, 51, 2, 143-60.

Thomasson, A. 2015, Ontology Made Easy, Oxford: Oxford University Press.

Thomasson, A. 2020, Norms and Necessity, Oxford: Oxford University Press.