IN DEFENCE OF ACQUAINTANCE

Thomas Edward Williams

A thesis presented for the degree of Doctor of Philosophy

UCL, Department of Philosophy

I, Thomas Edward Williams, confirm that the work presented in this thesis is my own.
Where information has been derived from other sources, I confirm that this has been
indicated in the thesis.
Thomas Edward Williams

Abstract

The aim of this thesis is to motivate, defend and explore the consequences of an acquaintance view (AV), which holds that acquaintance with an object is required for singular thought about that object. The thesis is divided into two parts. In part one I motivate and defend AV. In part two I explore some of the consequences of adopting AV.

In part one I argue that AV is well motivated and defensible given one particular account of singular thought. I call this account 'aboutness without properties'. I argue it is legitimate for AV to adopt this account of singular thought. I also argue that AV's take on acquaintance—according to which there are three kinds of acquaintance: perceptual acquaintance, memory acquaintance and communication-based acquaintance—is the best account. It makes acquaintance a unified psychological kind that can explain our capacities for thought. I argue that, given this account of singular thought and of acquaintance, AV is a well-motivated and defensible view of how our thoughts about objects connect up and make contact with the external world. I identify and attempt to solve three puzzles (in part inherited from Russell) which AV faces, given that it allows acquaintance with and singular thought about ordinary objects. I also suggest how AV can deal with apparent counterexample cases, via an account of descriptive names and of thought that purports to be about the non-existent.

In part two I argue that AV is committed to structured propositions. The aboutness without properties account of singular thought only works on a structured propositions view. Given some plausible assumptions about how the problem of informative identities needs to be solved, I also argue that AV is committed to a Fregean view of propositions.

Impact Statement

This thesis makes contributions in several areas of philosophy: most directly in the philosophy of mind, but also in the philosophy of language and in philosophical logic.

The argument in this thesis might be considered to have some impact in other fields. It might have some impact on the semantics of singular terms or of *de re* belief attributions in linguistics. I attended some helpful graduate seminars in the linguistics department at UCL on these topics. This thesis also might have some indirect impact on the psychology of cognition of objects

More generally, this thesis contributes to the philosophical project of understanding our place and position in the world, as intelligent human beings, by exploring how we are able to think about objects in the world, and what we think when we do so.

Table of Contents

Acknowledgements		13
PART ONE		15
Chap	17	
1.	Introduction	17
2.	Core cases of singular thought	17
3.	Acquaintance views	18
4.	Accounts of singular thought	22
5.	AV	33
6.	Consequences of aboutness without properties	35
7.	Chapter-by-chapter outline	38
Chap	ter 2: Russell on acquaintance	42
1.	Introduction	42
2.	Two distinctions and the Principle of Acquaintance	42
3.	Arguments for the Principle of Acquaintance	52
4.	Knowing what it is	55
5.	Acquaintance and knowledge of identity	59
6.	Acquaintance and knowledge of existence	66
7.	Conclusions	73
Chap	ter 3: Acquaintance with ordinary objects	75
1.	Introduction	75
2.	AV should allow acquaintance with ordinary objects	76
3.	An account of acquaintance with ordinary objects	77
4.	Three puzzles	84
5.	Identity judgement about ordinary objects	85
6.	Existential judgement about ordinary objects	86
7.	Judgement about the non-existent	93
8.	Conclusions	98
Chap	ter 4: Aboutness without properties	99
1.	Introduction	99
2.	Glick's proposal	100
3.	Constituency	103
4	Necessary aboutness and object-dependency	106

5.	An account of singular thought	111
6.	Conclusions	114
Chap	ter 5: In defence of AV	116
1.	Introduction	116
2.	Undermotivation	116
3.	Alleged counterexamples	120
4.	Descriptive names	121
5.	Some other cases	136
6.	Conclusions to part one	138
PART	ΓTWO	141
Chap	ter 6: Two Desiderata	143
1.	The first desideratum	143
2.	The second desideratum	145
3.	The plan for part two	147
Chap	ter 7: Possible worlds and two-dimensionalism	149
1.	Introduction	149
2.	The simple possible worlds view	149
3.	The simple possible worlds view cannot meet (SAD)	150
4.	The simple possible worlds view cannot meet (IID)	153
5.	Diagonal propositions	156
6.	Enriched propositions	163
7.	Epistemic two-dimensionalism	169
8.	Conclusions	172
Chap	ter 8: Structured coordinated propositions	174
1.	Introduction	174
2.	Coordinated propositions	175
3.	Informative identities	178
4.	Trading on identity	180
5.	A problem with coordinated sequences	183
6.	Conclusions	188
Chap	ter 9: Structured Fregean propositions	190
1.	Introduction	190
2.	Introducing senses	191

R	References		223
Overall summary and conclusions		221	
	10.	Conclusions	218
	9.	Empty senses and empty thoughts	214
	8.	Informative identities on a Fregean view	212
	7.	Singular and non-singular aboutness on a Fregean view	206
	6.	Propositions composed of primitive senses	204
	5.	Propositions composed of sense-tokens	200
	4.	Propositions composed of Peacockean senses	198
	3.	Peacocke's fundamental rules of reference	194

Acknowledgements

I'd like to thank all my supervisors at UCL. Rory Madden and Daniel Rothschild supervised me in the earlier stages of the project. I regret that I didn't produce more written work for them, but I'm very grateful for their input, advice and encouragement. The main ideas behind this thesis were shaped and inspired by several long conversations and supervisions with Mike Martin between 2014 and 2019. I'm extremely grateful to Mike for these. I feel very lucky that Tim Button was my primary supervisor while I wrote up this thesis. Many thanks to Tim for his generous and patient help with this project, and for all his advice and guidance.

I'd like to thank my examiners, Mark Sainsbury and Alex Grzankowski, for their helpful comments and suggestions. I would also like to thank Rory Madden, Fiona Leigh and Ulrike Heuer in their capacity as Graduate Tutors during my time at UCL. I'm grateful for their support and encouragement. I should say a special thanks to Richard Edwards for all his administrative support over the years.

Some of my ex-UCL philosophy friends—Léa Salje, Daniel Morgan, Alex Geddes, Vanessa Carr, Pete Faulconbridge and Julian Bacharach—read a draft paper based on a couple of parts of this thesis and gave some very helpful comments. Thanks for these. Thanks (and hi!) to my other philosophy friends too: Jerome Pedro, Tim L. Short, Alex Sayegh, Laura Silva, Edgar Phillips, Ed Lamb and Showkat Ali.

I owe an extra special thanks to Mog Hampson and Alex Geddes for their friendship. I actually wrote this thesis several years after both of you left UCL, but still, I feel like I owe you a lot. Thanks also to Adam Glen-Bott and Fia di Liscia for their friendship and gentle encouragement (and for lending me the laptop on which I wrote most of this thesis).

Most importantly, thank you to Karine Sawan for believing in me and for tolerating all of this.

PART ONE

Chapter 1: Acquaintance and singular thought

1. Introduction

In this thesis I defend an acquaintance view and explore the consequences of adopting this acquaintance view. I will argue that this acquaintance view is defensible and plausible, given one particular account of singular thought. I will argue that this is a really good account of singular thought. But it may not be the only good account. In this chapter I will argue that it is legitimate for an acquaintance view to appeal to and make use of this account. In the next few sections I will introduce acquaintance, acquaintance views and singular thought. I will set out my methodology for defending acquaintance views and my methodology for giving an account of singular thought. I will motivate and defend the account of singular thought that I will adopt in this thesis. Finally I will summarise the overall shape of my argument in this thesis.

2. Core cases of singular thought

Let's start with some cases. These are supposed to bring out two ways we can think about objects in the world.

Imagine that you have the plans to a warehouse in some far away country, one you have never visited. The plans tell you the boxes in the warehouse are always stacked in neat rows, 100 boxes deep and 50 boxes high. You can pick out an individual box via its position in the warehouse. For example, you could wonder whether the box that is 37th from the back of the warehouse and 10th from the top of the warehouse is empty. This is one kind of thought you could have about the box. Suppose that someone ships this same box to your house. You see the box and pick it up. It seems very light. You wonder whether *this* box is empty. This is another kind of thought you could have about the box in question.

Here's another case. Suppose you find out that the thirteenth president of the US was the first president born in the nineteenth century. Combined with your somewhat hazy background knowledge of US history, you infer that the tenth president was born in the eighteenth century, although you have no idea who that person was. Some time later, you come to find out that John Tyler was the tenth president. You read a little about him. You

judge: John Tyler was born in the eighteenth century. Again, we have two kinds of thinking here.

Let's call the second kind of thinking, in each of these two cases, *singular* thinking. When you're holding the box and can see it, your thought is singular (we can also say: your thought is *singularly about* the box). When you merely have the plans to the warehouse, your thought is about the box in question, but it is not a singular thought (we can also say: your thought is *non-singularly about* the box in question). Equally, when you don't know that *John Tyler* was the tenth president, you make a non-singular judgement about him. When you do find this out, and learn this name, you make a singular judgement.

Let's take this contrast as our starting point. I'll assume there is a genuine and interesting contrast between the singular and non-singular thoughts in cases such as these. I'll also assume there is a genuine, interesting similarity between the singular thoughts, in these cases. Next I'll introduce a particular view about these contrasts and similarities.

3. Acquaintance views

3.1

An acquaintance view holds that acquaintance is required for singular thought. More precisely: an acquaintance view holds that a subject must be acquainted with an object in order for that subject to entertain a singular thought about that object. This is not supposed to be a mere correlation claim or co-variance claim. Rather it is an explanatory claim. The claim is that acquaintance explains our capacities for singular thought. It is an essential part of this explanatory story. So there can be no singular thought about an object without acquaintance with that object.

In the box case from §2, an acquaintance view will claim that your acquaintance with the box (your seeing and holding it) enables and explains your singular thought about the box. In the president case, an acquaintance view will claim that your acquaintance with John Tyler enables and explains your singular thought about John Tyler. In addition, and more generally, it will claim that acquaintance is required in *any* case of singular thought about an object.

(Note that the fact that the cases from §2 can be described in this way doesn't show that an acquaintance view is correct or provide any obvious evidence for an acquaintance view. The cases are supposed to fix upon paradigm, core cases of singular thought. That they

both involve something that can be described as acquaintance doesn't show that all cases of singular thought involve acquaintance, nor that acquaintance is playing any uniform explanatory role in the cases.)

In this thesis I will defend an acquaintance view, although my defence will be conditional. One reason for this is that I think it is important to appreciate that 'acquaintance' and 'singular thought' are technical terms in philosophy. To some extent, it is an open question how we should understand them. Whether or not acquaintance views are defensible will depend on how these things are understood. This complicates any potential defence of acquaintance views. I will explain this over the next few sections.

There are some clear constraints on how we should understand 'acquaintance' and 'singular thought'. It is at least fairly clear what rough kind of thing they are supposed to pick out. We've already seen what rough kind of thing 'singular thought' is supposed to pick out. The cases in §2 indicate that talk of singular thought is motivated by an intuitive or rough distinction between two different ways in which our thoughts or judgements can be about objects in the world. There is a strong, immediate way and there is a weak, less direct way. Singular thoughts are thoughts that are about an object in the strong way.

Acquaintance is a relation between a subject and an object. It is a way that subjects can encounter or come into contact with an object, and thereby identify that object. It's common to describe acquaintance as a kind of *knowledge of* an object, although it is not immediately obvious what this means. The paradigmatic examples of acquaintance with an object will include perception of that object and perceptual memory of that object. In the box case, your perceptual relation to the box—seeing it and holding it—is acquaintance with the box. The open, contentious question is how far, and in what ways, acquaintance extends beyond perception and memory. It's clear acquaintance will need to extend beyond perception and memory in order for an acquaintance view to be defensible. This is indicated by the president case. John Tyler is long dead, so you cannot be perceptually related to him. However, I'll assume you could still make a singular judgement about him. As such, acquaintance must extend beyond perception and memory.

I will ultimately argue that the most plausible acquaintance view will hold that acquaintance involves perception of an object, memory of an object or standing in a communication chain that bottoms out in perceptual acquaintance or memory acquaintance. This last type of acquaintance allows acquaintance to be transmitted around a linguistic community. The picture is that perception is the most basic kind of

acquaintance. Memory acquaintance preserves perceptual acquaintance over time and turns acquaintance into a standing (rather than merely episodic) relation. When a subject gains the capacity to use a name for an object, by standing in a causal chain that traces back to perceptual acquaintance, that subject bears a standing acquaintance relation to the object in question. I will explain and argue for this account of acquaintance in chapter 3.

3.2

What motivates acquaintance views? Here is one important initial motivation. ¹ Reflection on core cases of the distinction between singular thought and non-singular thought suggests there is some kind of constraint on singular thought. Reconsider the warehouse case, where you merely have access to the warehouse plans. It is natural to think, not merely that the thought you do actually entertain (expressed by 'Is the box that is 37th from the back and 10th from the top empty?') is non-singular, but also that you are *incapable* of thinking a singular thought about the box in question. As such, it's natural to think there is some constraint on singular thought that you fail to meet in this case.

Suppose we deny this. We claim there are no constraints on singular thought, where this means that: whenever one is able to entertain a non-singular thought about an object, in a fixed environment or context, one is also able to entertain a singular thought about it. If we hold this position, then the difference between singular and non-singular thought will be fairly thin or uninteresting. Singular thoughts and non-singular thoughts may well have the same truth-conditions. Depending on our theory of propositions, this may entail they have the same propositional content. Singular thoughts and non-singular thoughts may each involve entertaining different kinds of concepts or thought vehicles. But it is unclear why we should care much about or be interested in the difference between singular and non-singular concepts, if a singular concept is deployable in thought whenever a coreferential non-singular concept is. Equally, it might be that singular and non-singular thoughts are reportable via different kinds of belief attribution sentence. For example, perhaps only the former are reportable via de re, relational or exported belief attribution sentences (see §4.2 below). But again, it's unclear why we should care much about the difference between these two kinds of belief attribution if there is no constraint on singular thought.

¹ I will discuss a more substantive and developed motivation for the particular acquaintance view I defend in this thesis in chapter 5, §2. This will take some work to explain and set up.

As such, if we hold there are no constraints on singular thought, then the difference between singular and non-singular thinking will be fairly thin or uninteresting. But cases like those introduced in §2 above indicate that—at least on the face of things—there is an interesting, important and substantive difference between singular and non-singular thought. Entertaining a singular thought is an important cognitive achievement which involves the exercise of some special, important capacity.

If that's the correct reaction to my initial cases, then we should accept the idea that there are constraints, of some kind, on singular thought. To say this is not to say that an acquaintance view is correct: there could be constraints on singular thought that are unrelated to, or at least different to, acquaintance constraints.² However an acquaintance view will claim that its acquaintance constraint best tracks, organises and explains our judgements about whether singular thoughts are available to a subject. For example, whenever a subject becomes acquainted with an object, it seems plausible that they immediately gain the capacity to entertain a singular thought about that object, if they didn't have this capacity before. This clearly doesn't entail that an acquaintance view is correct. But acquaintance views provide a good explanation of why this seems true.

As I understand things, this is a basic, initial motivation for acquaintance views. This motivation is not unassailable, but it warrants investigating whether acquaintance views are defensible and motivates considering how best to develop an acquaintance view.

3.3

To be totally explicit, there are three things at play in my discussion here. It's important to keep these things distinct. Let's recap in a way that makes this clear. We have:

- 1. Singular thought. This is a kind of thinking. Talk of singular thought can be motivated by appeal to cases such as those in §2.
- 2. Acquaintance. This is a relation between a thinker and an object. It is a way thinkers can come into contact with objects.
- 3. An acquaintance view. This is a view about the relation between (1) and (2). It claims that acquaintance is required for singular thought. More precisely, it claims a subject can entertain a thought that is singularly about object o only if that subject is acquainted with o. This is because acquaintance explains and enables singular

_

² For such constraints, see, e.g. Genone 2014 and Jeshion 2010.

thought. (Note that one can believe in (1) and (2) and take (1) and (2) seriously, without holding position (3).)

Whether acquaintance views are plausible or defensible will clearly depend on what singular thought and acquaintance are, in more detail. As I said, these are technical terms in philosophy. I will discuss singular thought in the next section. I'll leave further detailed discussion of acquaintance to chapter 3.

4. Accounts of singular thought

4.1

Suppose we agree that there is an intuitive difference between the two kinds of thinking in the cases from §2. Suppose we say the distinction between singular and non-singular thought is a genuine and interesting one. How can we generalise from cases like the above and give a more precise or full account of the difference between singular and non-singular thought about objects?

Philosophers have given a number of different, potentially conflicting answers to this question.³ Here's one kind of account. The broad idea is that the distinction between singular and non-singular thought is a distinction between descriptive and non-descriptive thought: singular thought exhibits non-descriptive aboutness whereas non-singular thought exhibits descriptive aboutness. The idea behind this is that if we are able to think about some object, in any sense, then we must have some way of identifying or fixing upon that object. Something must determine that we are thinking about that very object, rather than about any other object in the universe. There are two different ways our thoughts can come to be about objects in the world. We can think of these as corresponding to two ways we can identify or fix upon objects. This identification explains why we are able to think about an object at all and why are thought ends up being about *this* particular object, rather than about any other object in the world. The two modes of identification here are identification via description (i.e. identification *as* the unique satisfier of some description) and identification via something else, something more immediate and direct.

These two modes of identification give us two different, fundamental kinds of thinking. A singular thought identifies the object it is about via a non-descriptive mode of

 $^{^{3}}$ For discussion of some of these accounts see Glick 2018, Jeshion 2010, Sainsbury 2020 and Crane 2011.

identification. A non-singular thought identifies the object it is about via a descriptive mode of identification. Some philosophers make a similar point to this by claiming singular thoughts exhibit *relational* aboutness and non-singular thoughts exhibit *satisfactional* aboutness.⁴ I will turn this into a more precise account of singular thought in chapter 4. I will label this account the 'aboutness without properties account of singular thought'.⁵ On this account, I will say a singular thought exhibits or satisfies aboutness without properties with respect to an object. I will argue this account should say that singular thought is thought that exhibits necessary or rigid aboutness, not in virtue of concerning one or more properties that the object in question satisfies (I will explain this in more detail in chapter 4).

This account fits well with the core cases from §2. It appears to explain and track what's going on in these cases. A key feature of your non-singular thoughts, in the cases, is that they are about an object merely because that object happens to satisfy a description (the tenth president, the box that is 37th from the back and 10th from the top of the warehouse). These descriptions are how you identify the object. They explain how you're able to think about it. They explain why your thought is about *that* object, rather than any other object in the world. But for your singular thoughts something else must play this role, since no description does.⁶ That is to say, something else must play this *explanatory* role. In the warehouse case, it's natural to say your perceptual contact with the box plays this role. Your thought is about *that box* because that is the box you see and touch. If you were seeing and touching another box, your thought would've been about that box instead. In the president case it's a little less clear what plays this role, but it has something to do with your capacity to competently use the name 'John Tyler' to pick out John Tyler.

This aboutness without properties account of singular thought will be attractive to acquaintance views. It gives acquaintance views the best chance of being defensible. An acquaintance view will claim that a non-descriptive mode of identification of an object just is acquaintance with that object. It will claim every non-descriptive mode of identification of an object, for the purposes of thought about that object, is an acquaintance relation. If that is right, then clearly acquaintance will be required for singular thought, and some acquaintance views should be accepted. In this thesis, I will argue that such an

⁴ For this terminology see Bach 2010, 1987; Recanati 2012; Dickie 2015. This distinction draws, to some extent, on Burge 1977. Also see Glick 2018.

⁵ This terminology is due to Glick 2018.

⁶ For example, when you *initially* confront the box, no description could play this role.

acquaintance view is defensible, given this account of singular thought. My strategy for defending an acquaintance view will be to adopt this account of singular thought.

That said, this account of singular thought doesn't *entail* that any acquaintance view is correct. Adopting this account is not defining singular thought in a way that guarantees that acquaintance views are true. For one thing, this account doesn't obviously entail that there cannot be singular thought about the non-existent. Every acquaintance view entails this, since acquaintance with the non-existent is impossible: acquaintance is a *relation*; it must have two relata.⁷

4.2

This strategy for defending an acquaintance view—which involves choosing the aboutness without properties account of singular thought—will face a straightforward objection. There are other accounts of singular thought on which acquaintance views are implausible. Why should we not prefer these accounts?

For example, a popular suggestion is simply that a singular thought is a thought that can be truly reported via a particular kind of attitude attribution sentence. This kind of view is described by Hawthorne and Manley via two principles:⁸

HARMONY Any belief report whose complement clause contains either a singular term or a variable bound from outside by an existential quantifier requires for its truth that the subject believe a singular proposition.

SUFFICIENCY Believing a singular proposition about an object is sufficient for having a singular thought about it. (2012, p.38)

The second case in HARMONY—the existential quantifier case—draws on a distinction between two kinds of existentially quantified belief report. We have:

- 1. There is an *x* such that: *S* believes that *x* is *F*.
- 2. S believes that there is an x such that: x is F.

The difference here is between the relative scope of the existential quantifier and the 'believes that' operator. Suppose *S* believes there is a unique oldest tree in the forest and that any such tree must be over 100 years old. Suppose *S* doesn't have any idea which tree

⁷ See chapter 3, §7 for much more discussion of this.

⁸ This view of singular thought is endorsed by King 2020. For illuminating critical discussion see Goodman 2018.

⁹ For classic discussion of this distinction, see Quine 1956 and Kaplan 1968. In the jargon, (1) is a de re or relational or exported belief report. (2) is a de dicto or notional or unexported belief report.

is oldest. She has no particular tree in mind. In this case, report (2) is true, but (1) is false (put '... is over 100 years old' for 'F'). However, suppose that, later on, a forest warden points out the oldest tree in the forest to S. Now (1) is true as well as (2). One way to explain this is to say that there is now a particular tree such that, S believes of that tree that it is over 100 years old. HARMONY claims that any belief report of type (1)—but not (2)—requires for its truth that S believe a singular proposition.

This is an attractively simple account of singular thought. Is there any reason to prefer this account to the aboutness without properties account or vice versa? We can find some argument in favour of this belief attribution account in a recent paper by Jeffrey King (2020). He claims that, if we give up on HARMONY and SUFFICIENCY then we will lose our grip on what singular thought is. We will have no independent means of detecting its presence or absence in any given imaginary case, if we don't use the linguistic diagnostics suggested by HARMONY and SUFFICIENCY. King claims that if we give up on HARMONY and SUFFICIENCY, then the only way we can come up with an account of singular thought is to "rely on our intuitions about cases to decide whether singular thought is present or not and tailor theory to respect intuitions" (2020, p.100). But King claims, intuitions about whether singular thought is present are absent in a given case are vague, imprecise and unreliable. Reasonable people will disagree about this. It's hard to know how to settle the matter. King writes:

That the only starting point and main motivation we have in constructing a theory of singular thought is intuitions about its presence or absence in hypothetical cases is to me quite worrying. Given that singular thought is an abstract and theoretical notion, it isn't at all clear to me what pretheoretical intuitions about cases are tracking. Further, it seems to me unlikely there will be significant agreement on intuitions about the cases [...] (2020, p.96)

We should be broadly sympathetic to what King is saying here. However, I think we can offer an alternative methodology for constructing an account of singular thought, one

¹¹ I think that Hawthorne and Manley hold something similar, although they do not straightforwardly endorse HARMONY and SUFFICIENCY.

¹⁰ Although see Hawthorne and Manley 2012, §2.5 for some argument that the 'believing of locution is a bit slippery.

that doesn't have to rely on fine-grained intuitions about controversial cases, but nonetheless doesn't need to rely on HARMONY and SUFFICIENCY.¹²

On this methodology we start with core cases of singular and non-singular thought like those in §2. These are cases about which there is likely to be fairly widespread agreement. (I can think of few recent authors who would deny we can entertain singular thoughts about long dead but well-documented historical figures, like John Tyler.) Then we try to construct an account of singular thought that does a good job of explaining, tracking and accounting for the distinction in these core cases. We generalise from the cases and give an account that explains and tracks the relevant differences and similarities between the kinds of thinking that occur in the cases. In addition, we make sure that any good account of singular thought we give in this way carves out an independently interesting, genuine kind of thinking. This methodology provides two constraints on a good account of singular thought: first, accounting for and explaining core cases; and second, making singular thought a genuine and interesting kind of thinking.

If we accept these constraints, then the belief attribution account—the HARMONY and SUFFICIENCY account—likely doesn't give a good account of singular thought. It seems to give an overly permissive account of singularity. It certainly does so if we take the truth or falsity of belief reports at face value.¹³ To bring this out, consider the following case:

Ann is a 6-year-old girl, whom John has never met and whose existence he is unaware of. But John believes that every 6-year-old can learn to play tennis in ten lessons. So, meeting Ann, I tell her: 'John believes that you can learn to play tennis in ten lessons.' (Recanati 2012, p.152)

If the belief report here is true— although perhaps it is not totally obvious that it is—then HARMONY and SUFFICIENCY entail that John entertains a singular thought about Ann. It seems as if an account of singularity that is this broad and permissive will not be able to properly explain or track the distinction suggested by the core cases from §2. After all, John

¹² I also worry that, if we follow King's methodological advice, we just swap relying on unreliable, arbitrary intuitions about cases with relying on unreliable, arbitrary intuitions about the truth or falsity of belief reports. It is not always obvious whether belief attribution sentences are true or false, in a given case. There may be some apparently acceptable belief reports that are strictly speaking false, but are nonetheless felicitous or assertable in a context, owing to pragmatic factors. Relatedly, I worry that intuitions about the truth or falsity of singular belief reports in complex cases will be driven by a prior theoretical understanding of what singular thought is. If that's right, the truth of singular belief reports won't be a good way to come up with an account of singular thought.

¹³ If we don't take these belief reports at face value, then HARMONY and SUFFICIENCY won't determine or support any particular account of singular thought. See footnote 12, immediately above.

doesn't seem to have a thought that is at all relevantly similar to the cases of singular thought in the core cases from §2.

(The example also brings out that any acquaintance view is incompatible with this account of singular thought, although we shouldn't take this to count against this account.)

Relatedly, we should note that belief reports are highly context sensitive. ¹⁴ Their truth can depend on complex facts about their context of utterance. These contextual factors can include facts about the speaker of the belief report and their audience. These facts may have nothing to do with the believer or their state of mind. But surely whether or not a subject entertains a singular thought, on an occasion, should depend only on that subject's state of mind and *their* context. If we take the distinction between singular and non-singular thinking seriously, if we're realists about singular thinking, its presence or absence shouldn't depend on the context of someone who makes a belief attribution or on the context of the intended audience of a belief attribution.

Given this, perhaps the account should instead be understood as claiming: a subject has a singular belief iff there is at least one context in which one could make a true report of this belief whose complement clause contains either a singular term or a variable bound from outside by an existential quantifier. But this just reenforces my worry above. This gives us an extremely broad account of singular thought. For any belief about some object, even the most apparently paradigmatically non-singular, we could probably contrive some strange context in which that belief can be truly attributed with a singular belief report. Such a broad account of singularity will not be able to explain or track the distinction suggested by the core cases from §2. It won't meet the first constraint above on a good account of singular thought.

For these reasons, HARMONY and SUFFICIENCY don't give us a good account of singular thought. We should not prefer it to the aboutness without properties account of singularity. The objection that we cannot defend acquaintance views via the aboutness without properties account of singular thought, because we should prefer the belief attribution account instead, is not a good objection.

¹⁵ Another related reason is that this account seems to be insufficiently explanatory. It doesn't tell us what makes a singular or de re belief report appropriate. In general, it doesn't seem to fit well with the idea that the distinction between singular and non-singular thinking is an interesting or important distinction.

¹⁴ For detailed discussion of this, see Goodman 2018, King 2020, Hawthorne and Manley 2012, chapter 2. Crane 2011, 2013 (p.157ff.) and Recanati 2012 (p.153ff.) agree that this context sensitivity makes this a bad starting place for an account of singular thought.

However, this is not the only alternative account of singular thought. There are other accounts of singular thought on which acquaintance views are implausible, including some that seem to meet my constraints on a good account.

We could claim that singular thoughts have a name-like syntax. ¹⁶ This account relies on the idea that there is something like a language of thought. It relies on the idea that thoughts—that is, episodes of thinking or psychological states of thinking—are structured and that this structure closely matches the syntax of natural language. For example, it could claim that in entertaining a proposition p, one thereby employs a structure of concepts (or mental representations, or mental files) which have a syntactic structure that closely matches the syntax of natural language. This syntactic structure will closely mirror the most natural linguistic expression of the proposition p. If the proposition p is most naturally expressed with a sentence containing a name, then in entertaining p, one thereby employs a concept (or whatever) that has a name-like syntax. ¹⁷

This account seems to do a reasonable job of accounting for the difference between the different kinds of thinking in the core cases from §2. In those cases, you expressed your singular thoughts using a demonstrative or a name and you expressed your non-singular thoughts using a definite description. This is no accident. The present account claims that this is reflected in the syntax of these two thoughts. And it claims what makes your singular thought singular is simply that it has this kind of name-like syntax.

The account isn't obviously overbroad. Unlike the belief attribution account from §4.2, this account doesn't classify thoughts that clearly fail to match the rubric suggested by §2 as singular. It's also fairly plausible that this account of singularity make singular thought a genuine, interesting kind of thinking. At least, it does so if we hold that thoughts have determinate syntactic properties and that carving up thought-kinds based on their syntactic properties gives us genuine, interesting kinds of thinking. Why not hold this? So let's conclude this is one of the good accounts of singularity. It meets my two constraints from §4.2.

This account of singular thought doesn't sit well with an acquaintance view (although we shouldn't hold this against it). Consider a thought expressed by 'Julius was a tailor' where the reference of the name 'Julius' is fixed by stipulation as the unique inventor of

¹⁶ This suggestion is discussed, but not straightforwardly endorsed, by Sainsbury 2020.

¹⁷ For this kind of view of thought, see, for example Sainsbury and Tye 2012.

the zip. ¹⁸ Also suppose that no one really knows who invented the zip. This fact is lost to history. The sentence 'Julius was a tailor' contains a name. So the account under discussion here will probably claim that the thought in question has a name-like syntax and thus is singular. But a subject who entertains this thought plausibly need not be acquainted with Julius. Thus, if the thought in question is singular, acquaintance views are false.

Here we can see the objection from the start of §4.2 bite. The objection claims that it is not legitimate to defend acquaintance views by adopting the aboutness without properties account of singular thought, because there are other good accounts of singular thought on which acquaintance views are implausible. I argued that the belief attribution account (from §4.2) doesn't provide a good account of singular thinking. But—for all I've said so far and given my two constraints—the name-like syntax account does appear to do so.

4.4

One way to respond to this objection would be to claim that it is just obvious or intuitive that thoughts like the Julius thought above—which are classified as singular by the namelike syntax account, but which are not classified as singular by the aboutness without properties account—should not be described as singular. ¹⁹ If so, the name-like syntax account of singular thought cannot be correct. This is quite a common claim. ²⁰

I won't pursue this response here. I don't think it is obvious what to say about this. And I think we should take on board King's warnings about relying on fine-grained intuitions about cases, when we theorise about singular thought. It isn't obvious that the Julius thought isn't of a relevantly similar kind to the core instances of singular thought from cases like those in §2.

Instead, my response will be to claim that it is important to recognise that there may be no one correct or best account of singular thought. Different philosophers will have different things in mind when they make use of this technical term. We should accept that more than one of these accounts could be acceptable and legitimate.

¹⁸ This famous example comes from Evans 1982, p.50.

¹⁹ Plausibly, the Julius thought is not singular according to the aboutness without properties account because it exhibits descriptive identification, which prevents it from being singular. The thought is about Julius (whoever that is) merely because that person happens to satisfy the description 'the unique inventor of the zip'. See chapter 5, §4 for more discussion of descriptive names.

²⁰ See Jeshion 2010, p.116; Evans 1982, p.50. Compare Sainsbury 2020. For interesting recent discussion of the issue see Reimer 2020. I will discuss descriptive names in a lot of detail in chapter 5, §4.

We might find these claims alarming. I've said that whether or not acquaintance views are defensible will depend, to a significant extent, on what account of singular thought is adopted. And I've said there may be no one correct or best account of singular thought. We might worry that this leaves the question of whether acquaintance views are defensible as, in large part, a terminological one.

We can assuage these worries, to some significant extent. As I said in §4.2, there are two substantive constraints that can be placed on a good account of singular thought. Any good account of singular thought should make singular thought a genuine, interesting kind of thinking. Also, any good account of singular thought must explain and track the distinction suggested by the core cases of the kind I introduced in §2 above. This methodology doesn't allow just *any* account of singular thought to be a good account. It doesn't turn theorising about singular thought into a free for all. However, it also does not determine or force one single account as the best account. It allows and encourages pluralism about singularity. This is because there are different features in the core cases that we could point to and generalise to give an account of singular thought.

A key claim of this thesis is that acquaintance views must somewhat lower their ambitions and the scope of their view, in light of these points. The views should not claim that acquaintance is required for singular thought given *any* sensible or good account of singular thought. Nor should they claim that acquaintance is required for singular thought, given the single best account of singular thought. There may be no such thing. Rather an acquaintance view should (and must) content itself with the claim that acquaintance is required for singular thought, given at least one of the good accounts of singular thought. This account of singular thought should meet the constraints introduced above. It should make singular thought a genuine, interesting kind of thinking. Also, this account should explain and track the distinction suggested by the core cases such as those in §2, preferably in some revelatory, informative way. This is the best that an acquaintance view can hope for.

To recap: my strategy is to defend acquaintance views by arguing that they are defensible on the aboutness without properties account of singular thought. I won't claim that this is the one true (or best) account of singular thought. (The name-like syntax account might be an example of another good account.) Rather I will claim that this aboutness without properties account of singular thought is one of the good accounts.

For this strategy to work, we must ensure one extra thing. We must ensure that the aboutness without properties account of singular thought has its status as a good account independently of a background interest in acquaintance. And to avoid suspicion of circularity, we must ensure that it is not the case that the only reason to think that the aboutness without properties account is one of the good accounts is that it is amenable to an acquaintance view.

I do think the aboutness without properties account can avoid these worries and meet these demands. The claim that aboutness without properties is a plausible feature to generalise or abstract-out from the core cases in §2 doesn't depend on holding an acquaintance view. As I said in §4.1, the aboutness without properties account doesn't entail that an acquaintance view is correct. And we can motivate the account without mentioning or believing in acquaintance. We can claim that singular thought—as defined by the aboutness without properties account—is a genuine and interesting kind of thinking without holding an acquaintance view. So the claim that the aboutness without properties account of singular thought meets my two constraints—and is thus one of the good accounts—doesn't rely on or require holding an acquaintance view.

4.5

All that said, I think we can give some reasons to prefer the aboutness without properties account to the name-like syntax account. (Note that accepting these reasons won't require holding an acquaintance view.) I will take this as further support for the idea that the aboutness without properties account is a really good, legitimate account of singularity.

There are some minor reasons to prefer the aboutness without properties account of singular thought that I won't pursue in detail here. For example, the aboutness without properties account avoids commitment to mental syntax. More precisely, it avoids commitment to the idea that mental syntax can do explanatory work, for example in classifying and individuating kinds of thinking. It sometimes claimed that these commitments lead to problems about the communication of thoughts, since it is not obvious how anything can be shared between thinkers at this level.²¹ A minor advantage of the aboutness without properties account is that it avoids these commitments.

²¹ For discussion of these issues, see Fodor 2000; Prosser 2019; Heck 1995, 2002, 2012; Aydede 1998.

31

My main reason to prefer the aboutness without properties account goes as follows. There is widespread agreement that the paradigm case of singular thought is perceptual demonstrative thought. 22 These are thoughts that are about an object due to one's perception of that object. They are typically expressed by '*That* is F', perhaps accompanied by some physical pointing or by some inner, mental pointing. Perceptual demonstrative thought is the most basic, paradigm, most obvious instance of singular thought. That's why I started off discussion with the box case; most authors use perceptual cases when they give their initial example of a singular thought.

(Note that to say the above is not to say that an acquaintance view is correct. The fact that the paradigm case of singular thought is enabled by perception plus the fact that perception is the paradigm example of acquaintance doesn't entail—or even suggest—that *all* singular thought requires acquaintance.)

The aboutness without properties account of singular thought provides a good explanation of why perceptual demonstrative thought is the most basic, paradigm and most obvious instance of singular thought. According to the aboutness without properties account, a singular thought identifies its object via a non-descriptive mode of identification. Perception is the most basic, paradigm method we have of identifying objects in a non-descriptive way. So it's the most basic, paradigm example of a non-descriptive mode of identification. Thus it is very unsurprising that perceptual demonstrative thought is the most basic, paradigm and most obvious instance of singular thought.

The name-like syntax account doesn't provide a good explanation of this. A perceptual demonstrative thought isn't the paradigm or most basic example of a thought with a name-like syntax. To bring this out, consider the following three thoughts:

- 1. The thought expressed by 'That is red', entertained while attending to a red cup.
- 2. The thought expressed by 'Nero died in 68AD'
- 3. The thought expressed by 'Julius was a tailor'

Suppose there is a language of thought and that, in entertaining these thoughts, you deploy mental names with a syntax that mirrors the syntax of 'That', 'Nero' and 'Julius'. From a syntactic point of view, thought (1) is no more simple or basic than thoughts (2) and (3). (1) isn't any more of a paradigm example of name-like syntax than (2) or (3). If anything

32

_

²² See, for example, King 2020; Campbell 2002; Goodman 2016; Jeshion 2010, 2014; Dickie 2015, p.270; Genone 2014.

the opposite, since a demonstrative isn't really a name. We can say it is *name-like*, but it isn't any more name-like than 'Nero' or 'Julius'. As such, this account of singular thought doesn't give a good explanation of why perceptual demonstrative thought is the most basic, paradigm and most obvious instance of singular thought.

The conclusion I wish to draw here is not that the aboutness without properties account is the one correct account of singular thought. Nor do I wish to conclude that it is the best account of singular thought. Perhaps there are advantages to the name-like syntax account that I haven't considered here. Perhaps there are other accounts of singular thought that have advantages over the aboutness without properties account.²³

The conclusion I wish to draw is that the aboutness without properties account is one of the good accounts of singular thought. Stronger: it is a really good account. The considerations above provide further evidence for this. In §4.1 I argued the account meets my two constraints. In this subsection I argued it does so in some revelatory, virtuous, informative way. In addition, I've argued that the aboutness without properties account can be adopted by an acquaintance view without it worrying about circularity or vacuity: the aboutness without properties account doesn't entail an acquaintance view is correct and it carves out a kind of thinking that is interesting independently of a background theoretical interest in acquaintance.

In this thesis I will argue that acquaintance views are defensible given this aboutness without properties account of singular thought. And I've argued that it is legitimate to defend acquaintance views by choosing this account of singularity. These issues will be my main concern in the first half of this thesis.

5. AV

It will be helpful to have a label for the particular kind of acquaintance view I will defend in this thesis. Let's fix some terminology. I will say *an acquaintance view* is any view that holds that being acquainted with an object is required for a subject to entertain a singular thought about that object. Given there are many potential accounts of acquaintance and

_

²³ I'll consider a couple of further accounts of singular thought (e.g. related to object-dependency and rigid aboutness) in chapter 4. I have no particularly strong reasons to reject a rigid aboutness account, although I suspect it falls prey to the same worry about the primacy of perceptual demonstrative thought. In chapter 4, §4 I give an argument that object-dependency cannot be sufficient for singularity.

of singular thought, there will be lots of different acquaintance views. I will defend one particular acquaintance view. I'll call this AV. AV is committed to at least four claims:

(AV1) A subject can entertain a thought that is singularly about *o* only if that subject is acquainted with *o*.

(AV2) Some objects of acquaintance are ordinary objects.²⁴

(AV3) A subject is acquainted with an object *o* iff that subject bears at least one of the following three relations to *o*: (i) perceptual acquaintance; (ii) memory acquaintance; (iii) communication-based acquaintance.

(AV4) A thought is singularly about o iff that thought satisfies aboutness without properties with respect to o.²⁵

In general, on my terminology, acquaintance views are only committed to (AV1). However AV is also committed to the accounts of singular thought and acquaintance given by (AV2)-(AV4).

In the first part of this thesis, I will explicate and defend each of these four claims. In chapter 3 I will explain, defend and motivate (AV2) and (AV3). I don't have much more than I already said in this chapter to defend and motivate (AV4). However, I will argue in support of a more precise version of (AV4) and of singular propositions in chapter 4. In chapter 5 I will defend (AV1) from some key objections (undermotivation objections and counterexamples). In the second part of this thesis I will explore the consequences of adopting AV. I will focus on what account of propositions must be adopted by AV, especially given its commitment to (AV4).

In the next section I will explain and motivate part two of this thesis in more detail. Before I do this, it may be helpful to briefly compare AV to a couple of other recent acquaintance views in the literature. François Recanati (2010, 2012) defends something like an acquaintance view. But, in fact, Recanati does not accept (AV1), partly since he thinks there can be singular thought about the non-existent, with which we cannot be acquainted, and partly because of descriptive names (2012, chapter 13). Instead he thinks

²⁴ This is in contrast with Russell's acquaintance view, which only allows acquaintance with sense-data and abstract objects. For discussion of this, see chapter 2.

²⁵ In chapter four I argue in support of the following way to make (AV4) more precise. To look ahead, (AV4) will be understood as claiming

A proposition p is singularly about o in w iff (i) for any world w^* : if p exists in w^* , then p is about o in w^* ; and (ii) it's not the case that p is about o in w merely by concerning one or more of o's properties in w.

that acquaintance is a *normative* constraint on singular thought (2012, p.157).²⁶ So in my terminology he does not strictly-speaking hold an acquaintance view. I will offer an alternative account of thought that purports to be about the non-existent (chapter 3, §7) and thought expressed by descriptive names (chapter 5, §4), which allows us to preserve (AV1). Recanati definitely accepts (AV2). I think he would broadly-speaking accept (AV3) and (AV4). He develops (AV4) in a very different way to me, via a mental files framework. Recanati also seems to allow acquaintance to extend a little further than (AV3). Sarah Sawyer (2012) discusses an acquaintance view that is similar to AV. She seems to endorse (AV1) and (AV2). She seems to be roughly sympathetic to (AV4), although does not develop an account of singular thought in her paper. Sawyer explicitly claims that acquaintance should extend further than (AV3). I will discuss and reject her view of this in chapter 5, §3. Finally, Kent Bach (1987, 2010) seems to endorse a view that is similar to AV, although he develops (AV4) in a way that is different to me and his project is much more general than my project here.

6. Consequences of aboutness without properties

I've said that my defence of AV crucially relies upon the aboutness without properties account of singular thought. But adopting this account of singular thought is not without costs for AV. It has some consequences and comes with some commitments. I explore these in the second half of this thesis. I focus on the account of propositions that should be adopted by AV.

Earlier in the thesis, in chapter 3 (§7), I argue that AV should hold that a thought is singular iff it has a *singular proposition* as its content. Singularity is a property of propositions. This will allow it to say something potentially neat about thoughts which purport to be singularly about non-existent objects. AV is committed to these thoughts being non-singular. But it needs to give some explanation of the apparent similarity between these empty thoughts and genuinely singular thoughts. To do this, it can say that these empty thoughts are realised by the same kind of episodes of thinking that realise singular thoughts, but that these empty thoughts don't have a singular proposition as their content. They are unsuccessful instances of singular thought, which bear some

²⁶ Cf. Recanati 1993, pp.178-179. I find Recanati's claim about a normative acquaintance constraint a little puzzling. I suspect making sense of this claim requires buying into the specifics of his mental files framework. For recent critical discussion of this aspect of Recanati's view, see King 2020, p.98ff., Sainsbury 2020, p.27ff., Reimer 2020, pp.48-49.

psychological similarity to successful instances of singular thought, which must have a singular proposition as its content. ²⁷ AV can claim that only successful instances of singular thought are genuine singular thoughts, i.e. thoughts for which acquaintance is required.

I just said AV should claim a thought is singular iff it has a singular proposition as its content. And, given it adopts the aboutness without properties account of singularity, it should claim that a proposition is singular iff that proposition exhibits aboutness without properties (that is to say, it exhibits strong, direct, non-descriptive aboutness). In the second half of this thesis, I will argue that these two biconditionals commit AV to the claim that propositions are structured. Otherwise, there will be paradigmatically singular and paradigmatically non-singular thoughts that have identical propositional content. The aboutness without properties account of singular thought doesn't work when propositions are not structured. As such, I argue AV is committed to the idea that propositions have the special fineness of grain given by structure.

Why should we care about this result? I've said that the particular account of singular thought given by (AV4)—and the claim that singularity is a property of propositions (rather than thought vehicles or concepts)—will be absolutely crucial to my defence of AV in part one of this thesis. I think the fact that this account of singular thought demands structured propositions reveals something interesting, and pretty surprising, about acquaintance views like AV.

The most obvious and simple structured propositions for AV to adopt are Russellian propositions. These propositions are structured entities that have objects, properties and logical operators as immediate constituents. However, given some plausible assumptions, there are prima facie reasons for AV not to adopt this account of propositions. This is due to a problem inherited from Russell himself. Russell's theory of judgement cannot cope with singular informative identity judgements. Informative and uninformative singular identity judgements can come out as the very same judgement, on Russell's theory of judgement. He doesn't individuate judgements with enough fineness of grain to distinguish these things.

²⁷ For something similar to this suggestion, see Crane 2010, p.35. and Genone 2014. Crane draws on discussion in Martin 2002. Crane holds that unsuccessful instances of singular thought are still genuine instances of singular thought.

Part of Russell's solution to this problem is to claim that any constituent of judgement, any object that can be thought about in a singular way, must be such that it is impossible to be confused about the identity of that object. (I will set all this out in more detail in chapter 2.) However, any palatable acquaintance view must hold that we can be acquainted with and entertain singular thoughts about ordinary objects. Clearly most ordinary objects don't have this feature: we can be confused about their identity.

There are familiar descriptivist solutions to these problems. There are Russell's own descriptivist solutions and more sophisticated modern variants of these (for example, a two-dimensional semantics, which I discuss in chapter 7). However I will argue that neither are attractive to AV. AV holds the aboutness without properties account of singularity. This account of singularity is strictly committed to the idea that all singular aboutness is non-descriptive. So if AV holds that at least some informative identities are fully singular, which it should, then it cannot avail itself of descriptivist solutions to the problem of informative identities.

As I explain in chapter 6. there are two broad ways AV can aim to solve this problem in a non-descriptivist way. The first way is to give up on the idea that we should account for informative identities in terms of propositional content. On this option an informative identity judgement about o and a trivial judgement of o's self-identity have the same propositional content. The difference between the judgements would be in what concepts (or 'mental names') are deployed in making the judgement. For example, in the former judgement, it might be that two different concepts are deployed, and that this explains why the former judgement is non-trivial and informative. The second way is to retain the idea that we should account for informative identities in terms of propositional content, but to introduce extra fineness of grain to propositions.

I don't have any particularly strong reasons for AV not to pursue the first option, beyond the vague worries about mental syntax that I gestured at in \$4.5 above. If AV pursues the second option, I will argue AV should adopt something like a structured Fregean view of propositions.

At this point we might wonder: Why does AV need to be particularly concerned with informative identities? Aren't informative identities a potential problem for everyone? What's the link between acquaintance views and informative identities? To some extent, the problem of informative identities is indeed a problem for everyone. However, the problem bites particularly hard for acquaintance views like AV. My defence of AV is totally

dependent on the aboutness without properties account of singular thought. Given this, AV is strictly committed to all singular thoughts being non-descriptive. (More carefully: AV is strictly committed to the claim that all instances of singular aboutness are non-descriptive aboutness.) In addition, acquaintance views like AV think the distinction between singular and non-singular thought *really matters*. They think this distinction carves out two fundamental psychological kinds. As such, AV cannot avail itself of *any* sort of descriptivist solution to the problem of informative identities. When we look at Russell's acquaintance view, in chapter 2, all this will become clearer. We'll see that Russell is the father of acquaintance views and I will argue (in chapter 2, §5) that Russell restricted the objects of acquaintance to sense-data in part because he was concerned about informative identities. As such, acquaintance views that *do* allow acquaintance with ordinary object should take extra special care that they have avoided any residual problems with informative identities. Informative identities are a saliant issue for acquaintance views, in part given their historical origins.

To summarise: in the second half of this thesis I argue that adopting the acquaintance view defended in the first half—AV—requires some substantive, surprising and interesting commitments about the nature of propositions. AV is committed to structured propositions. And if AV wants to solve the problem of informative identities at the level of propositional content, AV is committed to the propositional content of thought being fine-grained in two specific ways: propositions must be structured, and their constituents must be individuated in a way that is fine-grained enough to deal with informative, singular identity judgements.

7. Chapter-by-chapter outline

This thesis is divided into two parts. There are nine chapters. In part 1 I argue that AV is defensible, given the aboutness without properties account of singular thought. Part 1 is comprised of five chapters.

In this chapter, chapter 1, I introduced acquaintance, singular thought and acquaintance views. I set out my methodology for defending acquaintance views (via the aboutness without properties account of singular thought). I also set out my methodology for constructing an account of singular thought (via generalization from the core cases, like the cases in §2). I argued in support of the aboutness without properties account of

singular thought, but recognised that this may not be the only good account of singular thought.

In chapter 2, I discuss Russell on acquaintance. One aim of this chapter is to bring acquaintance and its role into sharper focus, by considering the most obvious historical antecedent to AV. Another aim is to introduce two puzzles—related to identity judgement and existential judgement—that are part of what led Russell to restrict the objects of acquaintance to sense-data (along with universals and logical operators). These are prima facie puzzles that AV will have to solve, given that it allows acquaintance with ordinary objects. I frame my discussion of Russell by arguing in favour of what I call a non-EC (nonepistemic constraint) reading of Russell's reasons for holding his theory of acquaintance. This reading denies that Russell holds that acquaintance with an object is required for that object to be a constituent of thought because he holds there are substantive, independently specifiable epistemic constraints on singular thought, constraints that only acquaintance can allow us to meet.²⁸ Examples of these constraints might be that an object can be thought about in a singular way only if we have a special kind of knowledge of its existence, or of its identity, or of what it is. A non-EC reading denies that Russell thinks acquaintance is required for singular thought because acquaintance is the only thing that can allow us to meet these constraints. Instead, I claim Russell's theory of acquaintance rests (at least in part) on a simple regress argument, which falls out from the basic structure of his acquaintance view.

In chapter 3—'Acquaintance with ordinary objects'—my primary aim is to motivate and defend (AV2) and (AV3). I argue that the best account of acquaintance is that acquaintance is perception of an object, memory of an object or standing in a communication-chain that bottoms out in perceptual acquaintance or memory acquaintance. Acquaintance cannot be limited to perception and memory, if acquaintance views are to be plausible. However, the notion of acquaintance should not be made too broad. If more-or-less anything can count as acquaintance, such that there's little unity to the category, then AV will be undermotivated and uninteresting. My preferred account of acquaintance is well-motivated and ensures there's strong unity to the category of acquaintance. This will avoid any disunity objections to AV.

_

²⁸ By 'substantive, independently specifiable epistemic constraints on thought' I roughly mean an epistemic constraint that says more than: acquaintance is required for singular thought.

AV's preferred account of acquaintance clearly allows acquaintance with ordinary objects, unlike Russell's account. This leads to three prima facie puzzles for acquaintance views, partly inherited from Russell. The first puzzle is the puzzle of informative identity judgement, the second puzzle is the puzzle of informative existential judgement and the third puzzle concerns judgement about the non-existent. I sketch some options for how these puzzles can be solved, but I will not fully resolve these puzzles until part 2 of this thesis. As part of the solution to the third puzzle, I recommend AV should hold that a thought is singular iff it has a singular *proposition* as its content.

In chapter 4—'Aboutness without properties'—I explore how the aboutness without properties account of singular thought can be manifested when singularity is a property of propositions or thought contents. My aim in this chapter is to convince someone who is broadly sympathetic to the aboutness without properties account of singular thought—i.e. (AV4)—of the best way to give a precise account of singular propositions. I discuss four possible marks of singular propositions (constituency, necessary or rigid aboutness, object-dependence and a proposal from Glick 2018). I argue that a singular proposition is a proposition that is necessarily about an object, not in virtue of concerning one or more properties of that object.

In chapter 5—'In defence of AV'—my primary aim is to motivate and defend (AV1). I defend and motivate the claim that acquaintance (as characterised in chapter 3) is required for singular thought (as characterised in chapters 1 and 4). I focus on defending AV from two sorts of objection: counterexamples and undermotivation objections. I focus my attention on counterexample cases that stem from descriptive names. I present and defend a 'description-externalist' account of descriptive names, which holds that all descriptive names have descriptive content.

In chapter 6 I give a short introduction to part 2 of the thesis. In this part of the thesis, I explore the consequences of holding AV, given its aboutness without properties account of singular thought. I explore some commitments that must be taken on by such a view. I focus on which theory of propositions should be adopted by AV. I introduce two desiderata that this theory of propositions must meet. First, it must be able to properly make the distinction between singular and non-singular propositions in a way that accords with the account of this from chapter 4. Second, it must be able to cope with fully singular

informative identities. The first desideratum is a desideratum for anyone who adopts AV.²⁹ The second desideratum is only for those who want to solve the problem of informative identities at the level of propositional content.

In chapter 7 I discuss the view on which propositions are unstructured sets of possible worlds. I argue that these views struggle to make the required contrast between singular and non-singular propositions. So they fail to meet the first desideratum above. On this view, paradigmatically singular and paradigmatically non-singular thoughts end up with the same propositional content. The aboutness without properties account of singular propositions cannot work or get traction on this view. This means AV is committed to a theory of propositions on which propositions are structured. The simple possible worlds view also struggles with informative identity judgements. I argue that adding a two-dimensional semantics to this view of propositions doesn't solve either of these problems. Two-dimensional semantics doesn't make any progress on Russell's descriptivist solution to the problem of informative identities.

In chapter 8 I discuss a structured propositions view that makes some minimal changes to something like Russell's own theory of judgement. This is Kit Fine's relationist view of propositions (2007). As we would expect, this view can easily make the required contrast between singular and non-singular propositions. It easily meets the first desideratum above. But I argue that its account of 'trading on identity' is puzzling and unsatisfactory. This account has an important explanatory hole. I also argue that this undermines the relationist account of individual informative identity judgements.

In chapter 9 I discuss some Fregean views of propositions. I argue that two of these are good candidate theories of propositions to serve AV, and that they can meet both the desiderata above. I don't commit to any particular understanding of what senses are. And I argue that what really makes Fregean views work for AV is the fact that they take propositions to be structured, combined with the fact that they individuate the constituents of propositions in a way that is fine-grained enough to deal with informative, singular identity judgements. Given this, I ultimately remain non-committal whether Fregean views are the only option open to AV.

²⁹ Or anyone who adopts AV and uses my solution to the problem of empty 'singular' thought, which entails singularity is a property of propositions (rather than vehicles or concepts).

Chapter 2: Russell on acquaintance

1. Introduction

Russell's acquaintance view is the most obvious historical antecedent to AV. One aim of this chapter is to bring acquaintance and its role into sharper focus, by exploring Russell's acquaintance view. Another aim is to discuss and introduce two puzzles, related to identity judgement and existential judgement. As I will explain, these partly explain why Russell restricted the particular objects of acquaintance to sense-data. Since AV does not restrict acquaintance with particulars to acquaintance with sense-data—it allows acquaintance with ordinary objects—it will have to solve or sidestep these puzzles in some other way.

I will frame my discussion around considering Russell's reasons for adopting his acquaintance view (or his Principle of Acquaintance). I will suggest that a simple regress argument grounds Russell's Principle of Acquaintance. I will consider three other potential arguments for Russell's Principle of Acquaintance. These arguments claim that there is a substantive, independently specifiable epistemic constraint on singular thought. They claim that acquaintance is the only thing that allows us to meet these constraints. Therefore, acquaintance is required for singular thought. I argue we should not attribute any of these three arguments to Russell.

2. Two distinctions and the Principle of Acquaintance

2.1

A good way into Russell's theory of acquaintance are two distinctions which frame much of his epistemology.³⁰ I'll discuss the first distinction in this subsection, and the second distinction in §2.2.

³⁰Acquaintance was a central part of Russell's philosophy from around 1903-1918. Russell gives up on acquaintance in *The Analysis of Mind*, published in 1921 but drafted from 1918 onwards. He first started writing about acquaintance around 1903, in the notes that would become 'On Denoting' (published in 1905). Ian Proops suggests that Russell started thinking about acquaintance when he was reading William James (especially his *Principles of Psychology*) in the last decade of the nineteenth century. See Proops 2014 for very detailed historical discussion of Russell on acquaintance.

First, we have Russell's distinction between knowledge of truths and knowledge of things. We can think of knowledge of truths as what philosophers would now call 'propositional knowledge'. This is knowledge that something is the case. It is a state of mind that can usually be expressed with a declarative sentence.

That said, there may be something less than ideal about claiming knowledge of truths is propositional knowledge. Some time between 1907-1910 Russell abandoned the idea that propositions are the objects of attitudes such as judgement, belief and knowledge. Instead he adopted the multiple-relation theory of judgement.³¹ On this view, when a subject has an attitude—such as belief or judgement—the subject stands in a relation to each of the constituents of her judgement, rather than standing in a relation to a proposition. So, to use the well-worn example, if Othello believes that Desdemona loves Cassio, then prior to around 1907-1909, Russell would hold that Othello stands in the two-place belief relation to a proposition. Desdemona, Cassio and the loves relation are constituents of this proposition. We can represent Othello's psychological state with:

Believes(Othello, (Desdemona, loves, Cassio))

However, after 1910 Russell would say that Othello stands in a multi-place (in this case, four-place) belief relation to each of the objects that are constituents of his judgement (i.e. the objects that *would've* been constituents of the proposition he believes, on the old theory). We can represent this as:

Believes(Othello, Desdemona, loves, Cassio)

It is fairly harmless for us to talk about Russell's work in terms of propositional attitudes and propositional knowledge, but this multiple relation aspect of Russell's view is at least somewhat important. ³² One key ground of difference between acquaintance and knowledge of truths, is that acquaintance is a two-place or dual relation, whereas attitudes like belief, judgement and knowledge are multiple-place relations, with an arity greater than two.³³

On the other side of this first distinction is knowledge of things. This is an epistemic state or episode that can't be expressed with a declarative sentence. It's not knowledge *that*

-

³¹ See Griffin 1985 for a detailed account of the various versions of this view.

³² Russell himself frequently talks about propositions, even after he has officially abandoned them.

³³ For elaboration of this idea, see Amijee 2013.

something is the case nor is it the kind of epistemic state or episode where the question of truth or falsity can arise. Instead, we might think knowledge of things is supposed to roughly capture the ordinary and familiar sense in which we can know objects, people, places or events etc. That said, we shouldn't think that Russell's notion of knowledge of things is the same as our colloquial understanding of object-knowledge. It will become clear in the course of our discussion that it is very unclear exactly what knowledge of things comes down to. We're now in a position to turn to Russell's second distinction.

2.2

Russell distinguishes two kinds of knowledge of things. On the one hand we have knowledge by acquaintance, and on the other we have knowledge by description.³⁴ Essentially the distinction is between knowledge of an object based on a two-place relation to that object, and knowledge of an object based on knowing that the object uniquely satisfies some description.

What kind of two-place relation constitutes knowledge by acquaintance? Here's how knowledge by acquaintance is described in 'Knowledge by Acquaintance and Knowledge by Description':

I say that I am *acquainted* with an object when I have a direct cognitive relation to that object, *i.e.* when I am directly aware of the object itself. When I speak of a cognitive relation here, I do not mean the sort of relation which constitutes judgement, but the sort which constitutes presentation. In fact, I think the relation of subject and object which I call acquaintance is simply the converse of the relation of object and subject which constitutes presentation. That is, to say S has acquaintance with O is essentially the same thing as to say that O is presented to S. (1910-11, p.108)

There's a simpler characterisation in chapter five of the *Problems of Philosophy*:

We shall say that we have *acquaintance* with anything of which we are directly aware, without the intermediary of inference or knowledge of truths. (1912, p.25)

So we can say acquaintance is a two-place, direct, cognitive relation. It may be a mistake to try to say much more about what acquaintance is, or to try to reduce acquaintance to more familiar relations. It seems clear that Russell thinks that acquaintance is primitive. For example, Russell officially explains what experience is in terms of acquaintance, rather

. .

³⁴ This distinction actually predates the knowledge of things/truths distinction and is present as early as 1903-1905.

than vice versa (Russell 1913a, pp.35-37). According to Russell acquaintance with particulars has three varieties: perception, memory and imagination. ³⁵ Again, acquaintance is the primitive here. Russell would say that perception or sensation just is acquaintance with an object that is present at the same time as the subject (and is recognised as such). Memory just is acquaintance with an object that was present in the subject's past (and is recognised as such). Imagination just is acquaintance with an object that is present at the same time as the subject but isn't recognised as bearing any particular temporal relation to the subject. For Russell, an experience is just the occurrence of one of these episodes of acquaintance.

Let's move onto the second part of the second distinction. Knowledge by description is characterised by Russell as follows:

I shall say that an object is 'known by description' when we know that it is 'the so-and-so', i.e. when we know that there is one object, and no more, having a certain property (1910-11, p.113).

There is something less than ideal in saying that we know an object by description when we know that *it* is the so-and-so. This might make it sound as if we know an object by description only if we have an antecedent ability to think about it, such that we can judge '*it* is the so-and-so'. But this is not what is intended. Ian Proops gives a helpful characterisation of knowledge by description without this feature:

S knows *x* by description just in case for some property F, x = the F and S knows that there is exactly one F (2014, p.782)

As this makes clear, all that's required is that we know that a given description is satisfied by some unique object. This is sufficient for knowledge by description of the object in question.

We should also note that knowledge by description and knowledge by acquaintance are related to each other. Knowledge by description involves acquaintance. It doesn't require acquaintance with the object that is known by description, but it does require acquaintance with various universals and logical entities, which enable knowledge by description. This will become clearer in the next subsection.

.

³⁵ Acquaintance also has a role in introspection. But for Russell this should be amalgamated into sensory acquaintance, i.e. perceptual acquaintance.

So the idea here is that there are two different ways we can come to know an object. One way is to be related to that object, in some suitably direct and unmediated way. This is to be acquainted with the object. The other way is to know that the object in question uniquely satisfies some description, which is to know the object by description.

2.3

This brings us onto the most important part of Russell's theory of acquaintance. Russell says that acquaintance has an important role in making possible all thought about objects and all propositional knowledge. As Russell puts it:

All our knowledge, both knowledge of things and knowledge of truths, rests upon acquaintance as its foundation. (1912, p.26)

All thinking has to start from acquaintance [...] (1905, p.480)

These claims are explained and substantiated by what is often called Russell's 'Principle of Acquaintance'. I claim that this roughly says, in the terms introduced in chapter 1, that acquaintance with an item is required for singular thought about that item. Roughly speaking, it is Russell's version of (AV1) from chapter 1.³⁶ Let me explain this.

Various versions of the Principle of Acquaintance appear across Russell's writings:

Every proposition which we can understand must be composed wholly of constituents with which we are acquainted. (1912, p.32)³⁷

Whenever a relation of supposing or judging occurs, the terms to which the supposing or judging mind is related by the relation of supposing or judging must be a term with which the mind in question is acquainted (1910-11, p.117)³⁸

A version of this claim can be found as far back as 1905. In 'On Denoting' Russell writes:

in every proposition that we can apprehend (*i.e.* not only in those whose truth or falsehood we can judge of, but in all that we can think about), all the constituents are really entities with which we have immediate acquaintance (1905, p.492)

³⁶ 'Roughly speaking' because, as we'll see, Russell's Principle of Acquaintance is stronger than this. It also claims that acquaintance with a property or relation is required for that property or relation to be a constituent of judgement. AV doesn't hold this. Clearly Russell does not hold (AV2)-(AV4). I will compare AV and Russell's acquaintance view in §2.4 below.

³⁷ As we can see, even though Russell has abandoned propositions by this point, he sometimes writes in terms of them

³⁸ By 'term' Russell here just means 'constituent of judgement', not anything linguistic.

These quotations seem to make the same basic point. Every object or item that can be a constituent of judgement must be an object or item with which the thinker is acquainted. Something that we are not acquainted with cannot be a constituent of judgement.

To return to the example from §2.1: if Othello judges that Desdemona loves Cassio, then we can represent his attitude with:

Judges(Othello, Desdemona, loves, Cassio).

Russell's Principle of Acquaintance tells us that it is a necessary condition on Othello being related in this way that he is acquainted with Desdemona, the loves relation and with Cassio. To be explicit, there are *two* relations involved in Othello's holding this attitude.³⁹ There is the (in this case) four-place judging relation and also the two-place acquaintance relation.

We might be tempted to formulate Russell's Principle of Acquaintance as something like: every item a subject can think about must be an item that subject is acquainted with. But this can't be right, because Russell says, in 'On Denoting':

All thinking has to start from acquaintance; but it succeeds in thinking *about* many things with which we have no acquaintance. (1905, p.480)

Here's one way to understand what's going on. For Russell there are two ways a judgement can be about some object. ⁴⁰ A judgement can be strongly (or singularly) about an object, or it can be weakly (or non-singularly) about an object. When we have an instance of singular or strong aboutness, the item is an immediate constituent of the judgement. When we have non-singular or weak aboutness, it is natural to say that the judgement is about or concerns the object, but the object isn't a constituent of judgement.

If we understand things like this, then Russell's Principle of Acquaintance entails that every object a subject can think about in the strong, singular sense (i.e. such that it is a constituent of thought) must be an object that subject is acquainted with. If we think back to chapter 1, this means that Russell holds an acquaintance view, as I defined this view in chapter 1. Russell holds a version of (AV1). However, Russell allows that we can think

³⁹ Or there are three, if we include the 'loves' relation.

⁴⁰ Proops (2014, p.785) points to a passage in 'Knowledge by Acquaintance and Knowledge by Description' where Russell seems to use both senses of 'about' in a single sentence: "It would seem that, when we make a statement about something only known by description, we often *intend* to make our statement, not in the form involving the description, but about the actual thing described." (1910-11, p.116)

about items with which we are not acquainted. This is where knowledge by description comes in. According to Russell we can identify an item by coming to know that it uniquely satisfies some description. And this species of knowledge of things is sufficient for us to be able to think about an object in the weak or non-singular sense.

We need to add something to this. Russell's Principle of Acquaintance also claims that acquaintance with a property or relation is required for that property or relation to be a constituent of judgement. This means acquaintance still has a role in judgements that identify items by description. For example, suppose a subject S entertains the judgement expressed by 'The F is G'. The constituents of S's judgement will be the universals F and G and the logical apparatus involved in existential quantification. We can represent this, rather imperfectly, with:

Judges(S,
$$\exists$$
, x , ..., F , G)⁴¹

The Principle of Acquaintance tells us that the subject must be acquainted with every constituent of this judgement. Now the object that uniquely satisfies F will not be a constituent of the judgement. So it doesn't have to be an object of acquaintance. However, acquaintance with the universals F and G, and with the logical apparatus involved in existential quantification, is required, since these things are constituents. I take it this is why Russell says things like "All thinking has to start from acquaintance" (1905, p.480).

There is an alternative way to frame Russell's Principle of Acquaintance. There is also an important connection between acquaintance and *names*. Acquaintance is necessary for genuine naming. More precisely: Russell held that a subject being acquainted with an object is necessary (and indeed sufficient) for that subject to understand a logically proper name which refers to that object. (We can say a logically proper name is a name which is, under full logical analysis, a genuine name and is not a disguised definite description.) I take it there is a close connection between the idea that acquaintance is required for genuine naming and the idea that acquaintance is required for an object to be a constituent

-

⁴¹ The idea is that this judgement corresponds to the familiar $\exists x (Fx \land \forall y (Fy \rightarrow x = y) \land Gx)$. There's an ellipsis since surely there is further logical apparatus that one must be acquainted with. Exactly how this works, or what occurs as a term of judgement here, is not entirely clear.

⁴² "In order to understand a name for a particular, the only thing necessary is to be acquainted with that particular. When you are acquainted with that particular, you have a full, adequate, and complete understanding of the name, and no further information is required. No further information as to the facts that are true of that particular would enable you to have a fuller understanding of the meaning of the name." (Russell 1918, p.202)

of judgement. When you use a logically proper name to refer to an object, the judgement you express has that object as a constituent. If you genuinely understand a sentence that contains a logically proper name, you must be capable of entertaining a judgement that has the name's referent as a constituent. As such, the idea that acquaintance is required for genuine naming entails that acquaintance is required for the name's referent to be a constituent of judgement. Since this thesis is primarily about singular thought, rather than about singular terms (or sentences containing singular terms), I will focus attention on Russell's claims about the relationship between acquaintance and judgement. I won't say much about logically proper names. For example, I will shortly discuss some problems concerning identity and existence. I will discuss the relation between these problems and acquaintance. These problems could be framed as problems about identity sentences or existential sentences. But given the above, I will primarily frame them as problems about identity judgement and existential judgement.

2.4

There's one very important detail I need to add to my description of Russell's theory of acquaintance. This will provide the most significant difference between his acquaintance view and AV.

Russell thought that the only particulars we are acquainted with are sense-data, whereas I've said AV allows acquaintance with ordinary objects. What are sense-data for Russell? It's crucial to realise that Russell's sense-data view is very different to the more modern sense-data view, according to which sense-data are a particular kind of thing: the private, mind-dependent, mental objects that we are directly related to in perception. Hastead I think it's best to understand 'sense-datum' as a functional term for Russell. A key part of this function is to be the direct object of sensation and to account for at least some aspects of why our experience is the way it is. As such, there's no guarantee that sense-data are any particular kind of thing. It is clear that Russell accepts various arguments from conflicting appearances, which is partly what leads him to hold that sense-data are not ordinary entities. Sense-data are not medium-sized dry goods. But this shouldn't lead us to think

⁴³ Russell also changed his mind about whether we are acquainted with the self. I won't discuss this here.

⁴⁴ See, e.g. Jackson 1977 and Robinson 1994.

⁴⁵ We'll explore some other potential reasons in §5 and §6 below.

⁴⁶ Russell may have allowed acquaintance with ordinary objects when he first started writing about acquaintance. For example, Donovan Wishon (2017) and Ian Proops (2015) disagree whether Russell allows

that sense-data are mental entities—it's important for Russell's arguments against idealism that they are not. Russell does think sense-data are private entities, but apparently not for any very deep reason. Rather, as Michael Potter puts it, this is due to "an accidental consequence of the shape of our skulls" (2020, p.252). No two people experience exactly the same sense-data because no two skulls can occupy exactly the same space at the same time (also see Russell 1913a, p.30; 1917, p.114).

As such, we should be careful when we say things like 'Russell restricted the objects of acquaintance to sense-data and ruled out acquaintance with ordinary objects'. Sense-data are not a particular kind of thing and there is no definitional reason why sense-data could not just be ordinary objects (or, more plausibly, parts of ordinary objects, or surfaces of ordinary objects). Although as we said, Russell himself thought they were not ordinary objects or parts of these things.

Somewhat confusingly, Russell sometimes speaks of sense-data as if they *are* colours (or sounds or smells or textures; e.g. 1912, p.4). This claim needs to be handled with care. In general, it's very difficult to know what colours or sounds or smells are. But it's natural to think that colours are properties of some sort. After all, it is natural to talk of colours being instantiated by objects. However we should not think of sense-data as properties. Sense-data are particulars, not universals. Perhaps we should think of sense-data as tropes or particular property instantiations.⁴⁷ But we should not think of sense-data as being tropes or particular property instantiations *by ordinary objects*. A coloured sense-datum can be perceived in the absence of an ordinary object that instantiates that colour. I think it's best to think of sense-data as objects or entities that *instantiate* colour properties, as well as shape properties, auditory properties and temporal properties. However, as I've said several times, Russell holds they are not ordinary objects.

We can summarise the basic shape of Russell's theory of acquaintance as follows:

acquaintance with ordinary objects in 'On Denoting' (1905). The dispute partly turns on whether Russell's examples of acquaintance with ordinary objects are just illustrative. I won't worry about this here.

⁴⁷ For example, Russell writes: "When I speak of the sensible object, it must be understood that I do not mean such a thing as a table, which is both visible and tangible, can be seen by many people at once, and is more or less permanent. What I mean is just that patch of colour which is momentarily seen when we look at the table, or just that particular hardness which is felt when we press it, or just that particular sound which is heard when we rap it. Each of these I call a sensible object, and our awareness of it I call a sensation." (1914, p.76)

- I. Acquaintance is an unmediated, primitive, cognitive relation that we can bear to particulars and universals.
- II. Acquaintance is a kind of *knowledge of* its objects.
- III. Acquaintance with an entity is required in order for that entity to be a constituent of judgement.
- IV. The only particulars we are acquainted with are sense-data. These are not identical to ordinary objects.
- V. There are three kinds of acquaintance with particulars: sensory acquaintance, memory acquaintance and acquaintance in imagination.
- VI. In addition, there is a distinct kind of acquaintance with universals and a distinct kind of acquaintance with logical entities.

It will be helpful to quickly compare this acquaintance view—i.e. Russell's acquaintance view—with AV, which I introduced in chapter 1, §5. Let's take each point above in turn:

- Broadly speaking, AV agrees about feature I. Some caveats: AV will agree that acquaintance is non-inferential, but it won't commit to the claim that acquaintance is direct or unmediated in every sense. Also, I don't want to commit to the existence of universals. I will remain neutral about whether there is acquaintance with properties or relations (whatever these may be) and I will not discuss this. I will focus on acquaintance with objects or particulars. AV doesn't explicitly claim that, or place any weight on the idea that, acquaintance is primitive.
- Broadly speaking, AV agrees about feature II. One caveat: AV will not say anything substantive about what this knowledge consists in. (In this chapter I argue that Russell doesn't really do this either.)
- Broadly speaking, AV agrees about feature III, given that we take this as Russell's gloss on the idea that acquaintance is required for singular thought or singular aboutness. One caveat: AV will not adopt this particular account of singular thought, although it will adopt an account that is, in some sense, broadly similar (see chapter 4 (especially §3)). Another caveat: Russell thinks acquaintance with a property or relation is required for that property or relation to be a constituent of judgement. AV doesn't hold this.
- AV strongly disagrees about feature IV. AV holds there is acquaintance with ordinary objects.

- AV disagrees about feature V. AV denies that imagination is or could be a kind
 of acquaintance. It agrees that perception and memory are modes of
 acquaintance. As we saw, AV also holds that communication or testimony are
 modes of acquaintance.
- AV will be neutral about feature VI, as I explained in the first bullet point above. If these are kinds of acquaintance, I won't discuss them here.

3. Arguments for the Principle of Acquaintance

Why does Russell hold his Principle of Acquaintance? What is his argument for the Principle? Answering these questions will reveal something interesting about the shape of Russell's acquaintance view. ⁴⁸ In a sense, the answer to these questions is obvious. Russell tells us:

The chief reason for supposing the principle true is that it seems scarcely possible to believe that we can make a judgement or entertain a supposition without knowing what it is that we are judging or supposing about (1910-11, p.117).⁴⁹

I will discuss this passage in full in the next section. But for now, let's note that it is not clear this argument is saying anything more than: 'it seems scarcely possible to believe that we can make a judgement or entertain a supposition without being acquainted with what it is that we are judging or supposing about'. If so, the argument is not very helpful or illuminating.

Another reason why the answers to the questions above may seem obvious is that it is clear that Russell thinks acquaintance is the only thing that can bring objects directly before a subject's mind. And he thinks that, in order for an object to be a constituent of judgement, the judging subject must have that object directly before her mind. Therefore: acquaintance with an object is required for that object to be a constituent of judgement. But we should hope for something more precise, something that digs a little deeper. What does it mean to say an object is 'before a subject's mind'? Presumably this is just a metaphor.

⁴⁸ In the remainder of this chapter, I will focus most directly on Russell's argument for his claim that acquaintance with an *object* is required for that object to be a constituent of judgement. I won't focus on his argument for the claim that acquaintance with a property or relation (or logical operator) is required for that thing to be a constituent of judgement.

⁴⁹ An almost identical claim is made in *The Problems of Philosophy* (1912, p.32)

And again, it's not clear that saying 'an object must be before a subject's mind' is saying anything more than 'a subject must be acquainted with an object'.

I think we can extract a simple regress argument in favour of Russell's Principle of Acquaintance. It is not an argument that Russell explicitly gives, but it falls out pretty directly from the basic shape of Russell's theory of acquaintance. Russell thinks we must have some way of picking out and fixing upon any object, operator or universal we can think about. This is part of what he means when he talks of having knowledge of an object. He thinks we have exactly two ways to do this: via description and via acquaintance relations. On pain of regress, judgements must have basic constituents. Otherwise we'd never get to a determinate judgement. These basic constituents are not identified via description, otherwise they wouldn't be basic constituents. Therefore these basic constituents of judgement must be picked out or fixed upon by acquaintance. As such, acquaintance with an item is required in order for that item to be a constituent of judgement.

It is plausible that an argument like this is at least part of what underpins Russell's Principle of Acquaintance. It is at least part of the reason why Russell thinks the Principle is true. The question I will pursue here is whether Russell has any further reasons (perhaps deeper, more substantive and more satisfying reasons) to hold his Principle. For example, we might hope for an argument that, unlike the regress argument above, explains in more detail why we must have some way of picking out and fixing upon any object, operator or universal we can think about. We might hope for an argument that explains what this means and explains why acquaintance and description are the two exhaustive options here.

Commentators sometimes attribute to Russell a more substantive argument in favour of his Principle of Acquaintance. This kind of argument has a different shape. It gives a fuller account of the *knowledge of* provided by acquaintance relations and appeals to more specific epistemic properties of the acquaintance relation. I will call these arguments epistemic constraint or EC arguments.⁵⁰ The general form is something like the following:

EC reading of Russell sometimes motivates more general hostility to acquaintance views.

53

⁵⁰ Evans (1982, chapter 2 and especially chapter 4) is a good example of someone who attributes an EC-argument to Russell. We can also see some evidence of an inclination towards this understanding of Russell in Recanati 2012, chapter 1; Hawthorne and Manley 2012, chapters 1 and 3; Bach 2010. I suspect that this

P1: Acquaintance is the only thing that allows subjects to meet epistemic constraint X with respect to objects.

P2: In order for an object to be a constituent of a subject's judgement, the subject must meet epistemic constraint X with respect to the object.

Therefore: Acquaintance with an object is required for that object to be a constituent of judgement.

I will say that an EC argument is an argument that replaces 'epistemic constraint X' in the above with some epistemic constraint that doesn't mention acquaintance and cannot be reduced to acquaintance.⁵¹ Candidates for this constraint include a demand for some special knowledge of the *existence* of an object, or special knowledge of the *identity* of an object or knowledge of *what the object is.* I will discuss each of these candidates in turn. I will argue that we should not attribute any of these EC arguments to Russell.

One more bit of terminology: let us say that someone who claims that Russell holds his Principle of Acquaintance on the basis of an EC argument (perhaps in combination with the regress argument above) subscribes to an EC reading of Russell. I will argue against giving an EC reading of Russell.

What's the upshot of this? Why should we care? Here's one answer: If we should give an EC reading of Russell, then the summary of Russell's theory of acquaintance given in §2 is incomplete in some important way. We would need to give a much fuller account of the *knowledge of* provided by acquaintance, e.g. why and how acquaintance provides this knowledge, and why and how this knowledge is necessary for an object to be a constituent of judgement. We would need to give an account of this because, on an EC reading, Russell's argument for his Principle of Acquaintance crucially depends on this. On the other hand, if we don't give an EC reading of Russell, then §2 is not incomplete in this way. Russell's regress argument for his Principle of Acquaintance falls out, fairly straightforwardly, from the basic structure or shape of his theory, which I presented in §2. In addition, I will not give any kind of EC argument for AV in this thesis. If we don't

⁵¹ If 'epistemic constraint X' is reducible to acquaintance, then the argument won't provide good reason to accept the Principle of Acquaintance. For example, consider the constraint 'the subject must have the object directly before their mind' or 'the subject must have relational *knowledge of* the object'. These constraints just demand, in slightly different terms, that the subject is acquainted with the object.

subscribe to an EC reading of Russell, this provides an extra point of similarity between Russell's acquaintance view and AV.

4. Knowing what it is

4.1

Let's return to Russell's own apparent explicit argument in favour of his Principle of Acquaintance:

The chief reason for supposing the principle true is that it seems scarcely possible to believe that we can make a judgement or entertain a supposition without knowing what it is that we are judging or supposing about (1910-11, p.117)⁵²

It is not immediately obvious what Russell is saying here. I think there are at least two readings.

- (1) Russell is just saying something like: it is scarcely possible to believe we can make a judgement about a thing (where that thing is a constituent of judgement) without being acquainted with that thing. On this reading, Russell's claim says little more than: The Principle of Acquaintance is true because it is scarcely conceivable that it is false.
- (2) Russell is indicating there is a substantive, independent epistemic constraint on thought—i.e. *knowing what it is*—that only acquaintance allows us to meet. So Russell is saying something like: *In order for an object to be a constituent of judgement, we must know what it is, and acquaintance is the only thing that gives us this knowledge with respect to constituents of judgement.*

Reading (2) gives us an EC argument. Reading (1) does not. In this section, I will argue that it is hard to make sense of what reading (2) is getting at.

In order to do this in a systematic way, note that there are two broad options for the knowledge mentioned in 'knowing what it is' in (2). The knowledge in question could either be knowledge of things or knowledge of truths, i.e. either object-knowledge or propositional knowledge. (Note that the fact that acquaintance is itself a species of knowledge of things doesn't necessarily mean that 'knowing what it is' must be object-

55

⁵² An almost identical claim is made in *The Problems of Philosophy* (1912, p.32) For famous and influential discussion of this passage, see Evans 1982, chapter 4.

knowledge. For all we've said so far, acquaintance could provide us with propositional knowledge even if it is itself object-knowledge.)⁵³ I'll consider the propositional knowledge option first.

4.2

We are considering the view that, when Russell says it is scarcely possible to believe that we can make a judgement without knowing what it is that we are judging about, he is saying that we need some propositional knowledge about the object which is provided to us by acquaintance.

One obvious suggestion here is that Russell means something like the following:

(R1) If my judgement is about o—in the sense that o is a constituent of my judgement—then I must know that my judgement is about o.

So, if I make a judgement that o is F, (R1) says I must know that my judgement j is about o. That is to say, I must knowledgeably judge what we would express in English with: 'My judgement j is about o'. Let's call this second judgment j*. We should ask, must o be a constituent of j*?

If the answer is yes, then we can apply (R1) to j^* . In order to make judgment j^* I will need to know that j^* is about o, where this takes the form of the knowledgeable judgment expressed by 'My judgement j^* is about o'. Let's call this new judgement j^{**} . If o is a constituent of j^{**} , then we can apply (R1) to j^{**} . Hopefully we can see that this will lead to a never-ending series of judgements. I think the regress really is a problematic one. The view that making the simple judgement expressed by 'o is F' requires me to make an infinite series of reflective judgements (about what my judgements are about) is unattractive.

If o needn't be a constituent of j^* , then the idea we're discussing is that, in order to judge o is F, I must judge something expressed by 'My judgement is about the G', where o is the unique G. This avoids the regress above, because (R1) would not apply to j^* . But the problem with this view is it entails that: in order for o to be a constituent of my judgement, I must know o by description. But (a) it's not at all clear that Russell thinks this is true. It's knowledge by acquaintance that Russell thinks is required for an object to be a constituent

⁵³ Also see some brief discussion of Russell's 'Independence Thesis' in footnote 62 below (§6.2, p.67).

of thought. Nowhere does he say that knowledge by description is necessary. And (b) it is hard to see how this claim could support Russell's Principle of Acquaintance. What has the descriptive judgement 'My judgement is about the *G*' got to do with acquaintance with *o*, even if *o* is the unique *G*?

So this obvious reading will not work. It might be objected that we should really frame (R1) along the following lines:

(R2) If my judgement is about o—in the sense that o is a constituent of my judgement—then I must be *capable* of knowledgeably judging that my judgement is about o.

The informal idea here is, in order to make a judgement about *o*, I must be capable of answering the question 'What object is your judgement about?'. On the face of things, this is a reasonable requirement.

An advantage of (R2), over (R1), is that it may avoid the problematic regress mentioned above. It's much easier to accept we must be *able* to answer a never-ending series of questions about which objects our judgements are about, than it is to accept that we actually make an endless series of judgements. But I think there are a couple of problems with this suggestion.

First, it isn't plausible that the capacity to make the simple judgment expressed by 'o is F' depends on the capacity to make reflective judgements about which objects our thoughts concern. For example, we might think there are conceptually unsophisticated thinkers—e.g. young children—who are capable of making simple judgements about their environments but who aren't capable of answering questions about their own judgements, or of making reflective judgements about what objects their judgements concern. (That said, it's very unclear whether Russell would think this is much of a problem.).

Second, it is not clear how acquaintance with *o* would help us be able to answer the question 'What object is my judgement about?'. Why should acquaintance be required in order to answer this question? Without more being said, it's not obvious why (R2) would provide justification or support for the Principle of Acquaintance.

Plausibly there are other instances of propositional knowledge that Russell might be requiring, when he requires that I *know what it is* my judgement is about. But I suspect

that any plausible candidate may run into the same problems as above. So, I suggest we reject the idea that, when Russell says it is scarcely possible to believe that we can make a judgement without knowing what it is that we are judging about, he is saying that we need some propositional knowledge about the object.

4.3

If that's right, then 'knowing what it is' must be a matter of having some form of knowledge of things. On this reading, Russell is saying that acquaintance provides us with a special kind of non-propositional object-knowledge that is required in order for an object to be a constituent of thought. And this is why constituents of thought must be objects of acquaintance.

Of course, something like this must be right. This is just part of the basic shape of Russell's theory of acquaintance. The question is whether this gives us an EC argument in favour of the Principle of Acquaintance. The proponent of an EC reading of Russell needs to tell us—or at least indicate—exactly what kind of object-knowledge Russell is demanding here, such that it gives a substantive epistemic constraint on thought. The problem at this point is that it is desperately unclear exactly what kind of object-knowledge is being demanded here. There's nothing obvious we can say about this object-knowledge apart from saying that it is acquaintance. So there's little to stop us reading the passage along the lines of reading (1), for all we've said so far.

As such, I don't think the form of words 'knowing what it is' or the 'scarcely conceivable' passage will help much here, beyond what we've already said. It's just not clear enough how we can cash out or make sense of knowing what an object is or knowledge *of* an object, in terms that are independent of acquaintance.

So I suggest we change tactics at this point and try to think about some more specific possible epistemic constraints (and epistemic roles for acquaintance) that might explain why Russell thinks the Principle of Acquaintance is true. I will consider two potentially promising suggestions. First, that knowledge by acquaintance provides us with knowledge of the identity of its objects. Second, that knowledge by acquaintance provides us with knowledge of the existence of its objects. Ultimately I will argue that neither suggestion give straightforward support for an EC reading of Russell.

5. Acquaintance and knowledge of identity

5.1

It's common to attribute to Russell the view that acquaintance has an important epistemic role with respect to the identity of its objects. ⁵⁴ In outline, the idea is that Russell's theory of judgement cannot account for singular informative identity judgements. This commits him to the claim that there can be no identity confusions or identity questions concerning constituents of judgement. Acquaintance may justify and explain why such confusions are impossible. Perhaps acquaintance reveals or makes transparent the identities of its objects. This may be a promising way to make good on an EC reading of Russell. I will argue that these issues related to informative identities do not force us to accept an EC reading of Russell. Acquaintance itself does not have any clear role in solving this problem for Russell.

I'll first explain why Russell's theory of judgement commits him to the idea that there can be no identity confusions or identity questions concerning constituents of judgement. At first glance, this claim might seem puzzling. As we all know, Russell gives a descriptivist solution to the problem of informative identities. He claims all informative identity judgements are descriptive judgements or, more carefully, that all informative identity judgements are *partly* descriptive judgements. They are descriptive on at least one 'side' of the identity. We might've thought this solution works equally well independent of whether there can be identity confusions about constituents of judgement. Against this, I will argue that Russell's descriptivist solution only works, and is only satisfying, if there is no possibility of any identity confusion concerning constituents of judgement.

I'll explain why Russell is committed to there being no such possible identity confusions by considering what goes wrong if we *do* allow such identity confusions. For ease of exposition, and for illustrative purposes, I'll discuss an example in which we assume an ordinary object is a constituent of judgment (and is thus an object of acquaintance).⁵⁵

Imagine that I deny that the bee now buzzing by my window is the same as the bee that crawled into my hair yesterday. I decide that this would be too great a coincidence. But it

⁵⁴ For this kind of interpretation of Russell see: Proops 2011 and 2015, Evans 1982, Campbell 2009, Pears 1982, Davidson 1989, Recanati 2010, Bach 2010.

⁵⁵ Of course, Russell wouldn't allow this. It's easier to imagine the case when it involves two ordinary objects rather than two sense-data.

is actually the very same bee. Now also suppose the bee can be a constituent of my judgement, such that I can think about it in the strong or singular sense mentioned in §2.3. Suppose for the moment that my judgement here is fully singular and does not identify the bee by description. Let's call the bee in question 'b'. Given I reject the idea that I've been visited by the same bee twice, on the face of things, the best Russell can say to model my state of mind in this scenario is to say that the following is true:

(1) Believes(Tom,
$$b$$
, \neq , b).

But surely I believe—at least implicitly—that the bee is self-identical. So the following must be true.

(2) Believes(Tom,
$$b$$
, = , b).

But, given I'm rational, surely (1) and (2) can't both be true at the same time. To push the point further: suppose I come to find out that the very same bee has visited me twice. This realisation seems to be somewhat significant; it might surprise or interest me. But it doesn't seem that Russell can model this change in me, because (2) was true all along.

Of course, as we all know, Russell was aware of these points. He read the work of Frege and discusses issues related to this in 'On Denoting' (1905, especially p.485ff.) and in other work. His response to these points is to insist that all informative identity judgements are partially descriptive. On at least one 'side' of the identity judgement, the object must be identified by description. The logical form of my positive informative identity judgement in this scenario would have to be either:

(3)
$$\exists x \exists y (Fx \land Gy \land \forall z (Fz \rightarrow x = z) \land \forall z (Gz \rightarrow y = z) \land x = y)$$

Or

(4)
$$\exists x (Fx \land \forall y (Fy \rightarrow x = y) \land x = b)$$

Roughly, we can say (3) would be the logical form of my judgement I would express with 'The bee I'm seeing now is the same as the bee I saw yesterday'. (4) would be the logical form of the judgement I would express with '*That* is the same as the bee I saw yesterday'. Neither of these judgements are trivial. They are things I could learn, find out or doubt. Problem solved?

No, not quite. This descriptivist solution isn't adequate on its own. Russell can only convincingly appeal to his descriptivist solution if he holds identity questions can never arise with respect to constituents of judgement. The point is this: if identity questions can arise with respect to constituents of judgement, then it *should* be possible for a subject to make a fully non-descriptive, informative identity judgement about these constituents of judgement, in at least some circumstances. Russell *should* be able to model my state of mind when I make a fully singular informative identity judgement in the case above. But, as we saw, Russell cannot model the state of mind of someone who makes these judgements: according to Russell their judgement must either be partially descriptive or it must be trivial and non-informative. These are the only two options. But this seems wrong if there can be identity confusions regarding constituents of judgement. So, for Russell's descriptivist solution to be acceptable, he needs to convince us that identity confusions are not possible with respect to constituents of judgement.

This is where we can bring acquaintance back into the picture. On a fairly common reading of Russell, it is acquaintance that provides this explanation of why identity confusions are not possible with respect to constituents of judgement. Any constituent of judgement must be an object of acquaintance and any object of acquaintance is a potential constituent of judgement. So the claim that there can be no informative identities involving objects that are constituents of judgement is equally a claim that there are no informative identities involving objects of acquaintance. If acquaintance with an object precludes the possibility of any identity confusion with respect to that object, then Russell can avoid the problem we've set out in this section. This could provide support for an EC reading of Russell's theory of acquaintance. We can set out one version of this reasoning with the following argument:

- (A) Acquaintance gives us special knowledge of the identity of its objects in the sense that: identity confusions are impossible with respect to an object iff we are acquainted with it.
- (B) In order for an object to be a constituent of judgement, we need this special knowledge of identity (otherwise there should be non-descriptive identity judgements about *o* that are non-trivial and informative).

61

⁵⁶ Wishon (2017) calls this the 'received view' of Russellian acquaintance and cites Evans 1982, Davidson 1989, Campbell 2009 and Proops 2011, amongst others.

Therefore,

(C) Acquaintance with an object is required in order for that object to be a constituent of judgement.

This is an EC argument for Russell's Principle of Acquaintance. However, I'll argue that this gets things the wrong way round and can't provide support for an EC reading of Russell. Although something in the very rough vicinity of (A) and (B) are correct, acquaintance doesn't give any special sort of knowledge of identity here. The revised versions of (A) and (B) don't give any support for (C). Instead, I'll argue we should understand what's going on here as follows:

- (D) If *o* is a constituent of judgement, then any fully non-descriptive identity judgement about *o* is trivial and uninformative.
- (E) If *o* is a *potential* constituent of judgement, then it must be impossible to be confused about the identity of *o* (otherwise there should be fully non-descriptive identity judgements about *o* that are non-trivial and informative).
- (F) If *o* is an object of acquaintance, then *o* is a potential constituent of judgement.⁵⁷

Therefore:

(G) If o is an object of acquaintance, then it must be impossible to be confused about the identity of o.⁵⁸

This second argument is not an EC argument for Russell's Principle of Acquaintance. It doesn't claim that acquaintance is what allows us to meet some substantive epistemic

_

⁵⁷ It might be objected that (F) supposes the Principle of Acquaintance gives a sufficient as well as a necessary condition. And that there's no reason to assume this. But I don't think the first claim is quite right. (F) does not say: if S is acquainted with o, then S can thereby make a judgement with o as a constituent. Rather it's intended to convey that: if S is acquainted with o, then o is the kind of thing that can be a potential constituent of judgement. It might be claimed that even this is false. For example, it *might* be claimed that complexes of sense-data can be objects of acquaintance but that all constituents of judgement must be simple. If so, we can adjust the argument to accommodate. We can remove (F) and change (G) to:

If o is an object of acquaintance and a potential constituent of judgement, then it must be impossible to be confused about the identity of o.

If there is anything that is an object of acquaintance without being a potential constituent of judgement, I know of no reason to claim it must be impossible to be confused about the identity of o, according to Russell. ⁵⁸ For some argument that (G) is actually false according to Russell, see Wishon 2017. I won't discuss this argument here. Very briefly: we can pass over this because it's not totally clear that the identity confusions that Wishon identifies are confusions about *numerical* identity.

constraints on singular thought. The idea behind the argument is that (E) makes Russell's descriptivist solution to the problem of informative identities tenable. (G) is just a consequence of (E). And the support for (E) and (G) don't have to do with acquaintance having any substantive epistemic properties or features with respect to identity. In short, what does the work here is Russell's functional view of sense-data. I'll explain this in the next section.

5.2

Why *might we* have thought that (A) should be attributed to Russell? I think it is actually pretty mysterious how acquaintance could have the role described by (A). The fullest discussion of Russellian acquaintance and identity confusions can be found in the work of Ian Proops (2011, 2015). Proops (2011, p.152) claims it is the following feature of acquaintance that (at least partly) ensures there cannot be identity confusions with respect to its objects:

Full Disclosure (FD): Whenever a subject is acquainted with an object, the subject is acquainted with every part of that object.

The idea here, roughly speaking, is that (FD) rules out the possibility that objects of acquaintance can appear under different guises. This is because they cannot have hidden parts. And if objects of acquaintance cannot appear under different guises then, we might think, there could not be any open questions concerning their identity. Attributing (FD) to Russell might give some partial support for attributing (A) to Russell.

Unfortunately, there is only some rather indirect evidence that Russell would accept Full Disclosure. For very detailed discussion of these issues, which I don't want to get into here, see Linsky 2015; Proops 2015; Wishon 2017, especially §4. In any case, Proops himself doesn't think that (FD) ultimately supports (A). He thinks that (FD) would only rule out synchronic identity confusions and not diachronic identity confusions (2011, p.181). I think there is little reason to attribute a claim like (A) to Russell.

We can make progress here by putting aside these complex and controversial issues about acquaintance with parts and wholes. We can also put aside the properties of acquaintance itself. Instead let's focus on the objects that can be potential constituents of judgement.

If sense-data were such that they always present facts about their identity in a transparent way, then identity confusions would be impossible regarding constituents of judgement. (I'll take it for granted that identity confusions are impossible regarding universals and logical operators.) What would it take for sense-data to present facts about their identity in a transparent way? Sense-data would have to transparently present all of their qualitative properties. They could not have occluded or hidden qualitative properties. Sense-data would also have to be non-reencounterable. If we could re-encounter a sense-datum, then identity questions concerning that sense-datum could potentially arise.

I think it's fairly plausible that Russellian sense-data do present facts about their identity in a transparent way, and this doesn't really have much to do with the acquaintance relation. I want to reemphasise that we should exercise some caution when thinking about Russell's notion of sense-data. As we saw above in §2.4, Russell's sense-data view is very different to the more modern sense-data view. As we saw, we should understand 'sensedatum' as a functional term for Russell. So the question of whether or not sense-data present facts about their identity in a transparent way (e.g. by transparently presenting all of their qualitative properties and by being non-reencounterable) is in part the question of whether they need to do this, or whether they need to not do this, in order to play their functional role. Now if it is part of the role of sense-data—qua constituent of thought that they should help solve the problem of informative identity judgements, then this fact can provide a defeasible reason to believe that sense-data do present facts about their identity in a transparent way. This is so as long as this doesn't conflict with some of their other important roles. But it's hard to see any conflict here. What would be the point or function of sense-data with hidden qualitive properties, given their primary role is to explain the course of our sensory experience? And given this, what would be the point or function of sense-data that are reencounterable? It's hard to think of any.

If these thoughts are correct, they don't support the EC argument (A)-(C) above. It's not that identity confusions are impossible regarding constituents of judgement because the acquaintance relation provides us with perfect or full knowledge of the identity of its objects. Rather, constituents of judgement are such that questions about their identity simply cannot arise in the first place. These thoughts support an argument along the lines of (D)-(G). And the explanation or support for (E) and (G) flows from the functional role sense-data, not from any epistemic features of the acquaintance relation itself.

There is a wrinkle related to the claim that sense-data are not reencounterable on Russell's view. As Ian Proops points out (2011, §5), it is plausible that Russell's views on memory acquaintance entail that we can reencounter sense-data, so diachronic identity confusions may arise. If that's right, Russell's theory of memory acquaintance is in tension with his theory of judgement. To see this, consider a simple case: I experience sense-datum δ at t_1 and stop experiencing it at t_2 . Russell's view of memory acquaintance says it is possible to become reacquainted with δ after t_2 and in this sense reencounter it, even though δ is in the past.⁵⁹ When I am acquainted with δ in memory, it seems as if I could wonder whether δ is the same as the sense-datum I experienced earlier. In this way, on the face of things, I can be confused about the identity of a constituent of judgement. Full discussion of whether this kind of reencountering is problematic for Russell's solution to the problem of informative identities will take us too far afield. Russell's views on memory acquaintance are complex, somewhat unstable and possibly not coherent. 60 And a detailed discussion of this will have little pay-off for my purposes. If memory acquaintance can lead to identity confusions regarding its objects, in a way that is problematic for Russell's solution to the problem of informative identities, this clearly won't provide any reason to prefer (A)-(C) to (D)-(G). It clearly won't provide support for the idea that acquaintance provides a special sort of knowledge of the identity of its objects.⁶¹

-

⁵⁹ Note that any memory *experience* or *imagery* that accompanies memory acquaintance is not itself experience of or acquaintance *with* δ , since the object of this imagery or experience would have to be in the present, according to Russell, whereas δ is in the past. The acquaintance with δ after t_2 is separate to and is not constituted by any imagery or experience. See Russell 1912, p.66; and 1913*a* p.9. For detailed discussion of this strange aspect of Russell's views on memory acquaintance, see Martin 2015, pp.4-5.

⁶⁰ For commentary that suggests Russell's view of memory acquaintance is incoherent see Bostock 2012, chapter 7; Pears 1975; Miah 1998. I think this is a pretty common view. For detailed defence of Russell on some of these points, see Martin 2015, 2019. That said, Martin also ultimately concludes that Russell's view is unsatisfactory.

⁶¹ There's another potential wrinkle. Are non-renencounterable sense-data incompatible with Russell's later sensibilia view and his 1914 project of constructing the physical world from sensibilia? Not obviously, I think. For example, in 'The Relation of Sense-data to Physics' Russell asks: "Do sensible objects persist when we are not sensible of them? In other words, do *sensibilia* which are data at a certain time sometimes continue to exist at times when they are not data?" (1917, p.112). His answer is: "I propose to assert that sense-data are physical, while yet maintaining that they probably never persist unchanged after ceasing to be data. [...] If there were, as some have held, a *logical impossibility* in sense-data persisting after ceasing to be data, that certainly would tend to show that they were mental; but if, as I contend, their non-persistence is merely a probable inference from empirically ascertained causal laws, then it carries no such implication with it, and we are quite free to treat them as part of the subject-matter of physics." (1917, p.112). It sounds as if Russell is saying here that no individual sense-datum can become a sensibile and then become a datum again. (Although he's certainly not saying this is a logical impossibility, rather just empirically unlikely.) If this is the case, then sense-data cannot be reencountered on his later view.

To recap: we have a problem related to informative identities, which is created by Russell's theory of judgement. This problem is partly solved by Russell's descriptivism about identity judgement. But there was a residual problem: it must be that identity confusions cannot arise with respect to constituents of judgement, otherwise informative, fully non-descriptive identity judgements *should* be possible. This problem can be solved mostly because of Russell's functional view of sense-data. Russell can plausibly deny there can be identity confusions with respect to sense-data because it is part of their functional role to serve as the particular constituents of thought. This means we can say they present facts about their identity in a transparent way. Questions about the identity of sense-data simply cannot arise.

As such, acquaintance doesn't really come into this story of how Russell solves the problem of informative identities. For example, the fact that sense-data are not reencounterable is more directly a fact about sense-data themselves, rather than a fact about the acquaintance relation. This property of sense-data flows from their role *qua* constituents of judgment, rather than from their role as objects of acquaintance or of sensory perception. As such, I think we should understand Russell's views on the relation between acquaintance and identity judgement along the lines of (D)-(G) above, rather than the EC argument (A)-(C).

I conclude that we should reject the idea that the problem of informative identities gives a reason to read Russell as offering an EC argument for his Principle of Acquaintance. Next let's look at acquaintance and knowledge of existence. The shape of my argument here will be broadly parallel to the argument about identity.

6. Acquaintance and knowledge of existence

6.1

Russell seems quite clear that one epistemic feature of acquaintance is that it gives us some kind of knowledge of the existence of its objects. For example, he writes, quite explicitly:

If I am acquainted with a thing which exists, my acquaintance gives me the knowledge that it exists. (1912, p.23)

Given that sense-data are the paradigm and most interesting objects of acquaintance in this context, there's some reason to think this is an especially secure form of knowledge:

Some knowledge, such as knowledge of the existence of our sense-data, appears quite indubitable, however calmly and thoroughly we reflect upon it. (1912, p.87)

So it's natural to read Russell as claiming that the knowledge of existence provided by acquaintance has some kind of supercharged epistemic status. In particular, that acquaintance with a sense-datum gives the subject some incredibly strong form of knowledge that it exists (or at least, of its existence).

All this seems very promising for an EC reading of Russell. We might reason as follows, with an argument that is parallel to (A)-(C) from \$5.1:

- (H) Acquaintance gives us very strong, sceptic-proof knowledge that its objects exist in the sense that: we have this kind of knowledge with respect to an object iff we are acquainted with it.
- (I) In order for an object to be a constituent of judgement, we need this kind of knowledge that it exists.

Therefore,

(J) Acquaintance with an object is required in order for that object to be a constituent of judgement.

But I'll argue we should not accept this reading of Russell. My argument will be broadly similar to that concerning (A)-(C) in §5. I'll argue that Russell's comments about acquaintance and existential judgement don't straightforwardly show an EC reading of Russell is correct. There are several factors complicating Russell's writings regarding these issues. The main factor I'll explore here is that Russell has some complicated views about judgements and sentences that assert existence. ⁶² This means that (H) cannot be something Russell would hold.

propositions about it—theoretically we need not know any propositions about it" (1912, p,84). Also see

⁶²Another factor that I won't discuss in much detail: Several commentators attribute to Russell a strong 'Independence Thesis' (see, for example, Proops 2014, 2015; Amijee 2013, Wishon 2017). This says that acquaintance with an object is independent of and insufficient for any propositional knowledge about that object. This is based on Russell's claims that "Knowledge of things, when it is of the kind we call knowledge by *acquaintance*, is essentially simpler than any knowledge of truths, and logically independent of knowledge of truths" (1912, p.25). And "We may have knowledge of a thing by acquaintance even if we know very few

Around 1910-1918 Russell denied: (i) that existence is a first-order predicate; (ii) the meaningfulness of sentences that assert the existence of objects named by genuine, unanalysable names; and (iii) that a judgement can assert the existence of an object which is a constituent or term of that judgement. For example, in *Principia Mathematica* he writes:

It would seem that the word 'existence' cannot be significantly applied to subjects immediately given; i.e. not only does our definition give no meaning to 'E! x,' but there is no reason, in philosophy, to suppose that a meaning of existence could be found which would be applicable to immediately given subjects. (1910, p.175)

And in the *Theory of Knowledge* manuscript:

We seem to judge that objects of sense exist, and add nothing, in so judging, to what is already given in sense. But the fact is that the whole conception of existence is the result of a confusion between descriptions and true proper names. Of an actually given *this*, an object of acquaintance, it is meaningless to say that it "exists". (1913a, p.138)

Finally, in 'The Relation of Sense-Data to Physics':

Given any datum x, it is meaningless either to assert or to deny that x 'exists'. We might be tempted to say: 'Of course x exists, for otherwise it could not be a datum'. But such a statement is really meaningless, although it is significant and true to say, 'My present sense-datum exists', and it may also be true that 'x is my present sense-datum'. The inference from these two propositions to 'x exists' is one which seems irresistible to people unaccustomed to logic; yet the apparent proposition inferred is not merely false, but strictly meaningless. (1917, p.128).

Clearly this complicates understanding Russell's claim that acquaintance with a sensedatum gives one the knowledge that it exists.

Why does Russell think that 'o exists' is meaningless, when it expresses a judgement in which o is a constituent? Here's one way to explain this. There seem to be two options for the logical form of 'o exists'. One option is:

Russell, 1914, p.145. There might be some tension between this and (H). That said, I think we should be careful not to overread Russell's independence claims here. It's not obvious to me that they require anything stronger than the claim that acquaintance with an object is independent of propositional knowledge about that object in the sense that: it's possible that one can be acquainted with an object without *actually* making any judgement about that object. This might be compatible with (H).

(i) *Eo*

where E is an ordinary, first-order predicate. Russell doesn't think this is a possibility because he denies that existence is a first-order predicate. Another salient option is that the logical form is:⁶³

(ii)
$$\exists x \ x = o$$

(ii) is not meaningless or nonsense according to Russell. It is perfectly well-formed.⁶⁴ In fact, (ii) is obviously a logical truth in classical first-order logic. So, given (ii) is not nonsense, Russell will need to argue that (ii) isn't an appropriate logical form for 'o exists'.

One simple reason he could give is that, when *o* is a contingent object, the judgement that is expressed by '*o* exists' should be an empirical, a posteriori judgement. It should be something someone could learn upon encountering *o*. This would be hard to make sense of if the logical form of this judgement is an a priori logical truth. Presumably the simple logical truth (ii) is something everyone already knows, or something they could easily work out via simple logical reasoning.

Another reason we could give for doubting that (ii) gives the logical form here is that when *o* is an ordinary, contingent object, the judgement that is expressed by '*o* exists' should be a contingent judgement. It seems wrong to say that the logical form of '*o* exists' could be a logically necessary truth.

If (i) and (ii) are the only two options for the logical form of 'o exists' and neither option works, then, I suppose, Russell can conclude the sentence is meaningless or nonsense.

So it seems clear that Russell doesn't think that the knowledge acquaintance gives us about the existence of its objects would be most naturally expressed in English with 'o exists', where o is a genuine proper name and where the judgement corresponding to the sentence contains o as a constituent. Given this, what sense can we make of an ordinary sentence such as 'o exists'? The obvious suggestion, for Russell, would be that it has a logical form like:

$$\exists x (Fx \land \forall y (Fy \rightarrow x = y))$$

⁶³ We could just define 'Eo' as $\lambda y(\exists x \ x = y)$, in which case options (i) and (ii) are the same.

⁶⁴ This fact leads Bostock (2012, pp.262-264ff.) to claim that Russell is mistaken to deny that (ii) could be the logical form of 'o exists'.

If *o* is a sense-datum, this will correspond to a sentence like 'The object of my present acquaintance exists'. ⁶⁵ So, whenever we make a judgement that appears to assert the existence of one of its constituents, we in fact make a judgement that identifies that object via a description, such that the object isn't a genuine constituent of the judgement. In short: Russell is saying all existential judgements are descriptive.

6.3

Where does this leave the EC argument (H)-(J) above? Well given the above, the best we can say is that when Russell says 'acquaintance with a thing gives me the knowledge that it exists', the knowledge in question is grounded in a judgement that identifies the object via knowledge by description (albeit a description that involves acquaintance). It's not really a judgement of the form 'o exists'.

Reconsider the argument (H)-(J) from §6.1. Given discussion in §6.2, (H) cannot be true when the knowledge in question involves a non-descriptive judgement of existence. So perhaps we should re-formulate the argument as follows:

- (K) Acquaintance gives us very strong, sceptic-proof **descriptive** knowledge that its objects exist (i.e. knowledge that could be expressed with 'The object of my present acquaintance exists') in the sense that: we have this kind of knowledge with respect to an object iff we are acquainted with it.
- (L) In order for an object to be a constituent of judgement, we need this kind of descriptive knowledge of existence.

Therefore,

Therefore,

(M) Acquaintance with an object is required in order for that object to be a term or constituent of judgement.

The difference here is that (K)—unlike (H)—makes it clear that the required knowledge of existence doesn't contradict Russell's views on existential judgement.

⁶⁵ In support of this, note that the passage from page 138 of the *Theory of Knowledge* manuscript, quoted above, continues: "Of an actually given *this*, an object of acquaintance, it is meaningless to say that it "exists". But the very same word which, at one moment is used as a true proper name for a given object, may be used in the next moment as a description. We may say "this exists", meaning "the object of my present attention exists", or "the object I am pointing to exists." Here the word "this" has ceased to function as a proper name, and has become a descriptive word, in which an object is described by its properties." (1913a, p.138)

However, it's unclear (L) is true for Russell. It doesn't seem to align with Russell's claim that all thinking starts from acquaintance or knowledge by acquaintance. Russell never says that knowledge by description of an object is necessary for that object to be a constituent of judgement. This seems to get things the wrong way round. There's also a potential problem with (K). A complex descriptive judgement like 'The object of my present acquaintance exists' will require introspection and analysis. Analysis is where the possibility of error can creep into judgements, according to Russell (see 1912, pp.65-66ff.). So maybe this kind of judgement, unlike a simple singular judgement, wouldn't plausibly be sceptic-proof and free from doubt, as (K) suggests.

I think we can come up with an alternative understanding of what is going on here. Notice that, given Russell's view of existential judgement, a singular, non-descriptive judgement that asserts the existence *or non-existence* of a constituent of that judgement is unintelligible and unframeable. According to Russell, $\neg Eo$ and $\neg \exists x \ x = o$ are just as bad an option for the logical form of 'o does not exist', as (i) and (ii) above are for 'o exists', for the very same reasons. This means that, for any object of acquaintance, a non-descriptive judgement that asserts that object's non-existence is unintelligible and unframeable.

We might pursue the following line of thought: it's not that acquaintance provides some positive epistemic status to judgements asserting the existence of its objects. Rather, for Russell it's just automatically impossible to doubt the existence of any constituent of judgement, since any non-descriptive judgement that raises the possibility of the non-existence of a constituent of judgement is nonsense; it is unframeable. And any object of acquaintance is a potential constituent of judgement, so, for Russell, we can say the same about objects of acquaintance. We cannot doubt their existence in the sense that, we cannot frame the possibility that they do not exist, via a judgement that has these objects as constituents.

We can set out the reasoning here as follows, with an argument that is parallel to (D)-(G) from §5.1:

(N) If *o* is a constituent of judgement, then any non-descriptive judgement that denies the existence of *o* is nonsense or unframeable.

⁶⁶ For further discussion of these issues, see Proops 2015, especially section 5.

- (O) If *o* is a *potential* constituent of judgement, then it must be impossible to doubt the existence of *o* (otherwise a non-descriptive judgement that denies the existence of *o* should make sense and be frameable).
- (P) If *o* is an object of acquaintance, then *o* is a potential constituent of judgement.⁶⁷

Therefore:

(Q) If o is an object of acquaintance, then it must be impossible to doubt the existence of o.

On this interpretation, acquaintance 'gives me the knowledge that its objects exist' in the strange sense that acquaintance with an object guarantees that it is unintelligible that that object does not exist. This is what (Q) says. But on the interpretation offered here, (Q) isn't justified or established on the basis of the idea that acquaintance has special epistemic properties regarding the existence of its objects. Rather, (Q) is justified and established via (O) and (P).

Unlike (H)-(J) and (K)-(M) above, (N)-(Q) isn't an argument that can establish Russell's Principle of Acquaintance. At best we can say that something closely related to the converse of the Principle, i.e. (P), is a premise in the argument. But there's no route from (Q) to the Principle as I have framed things. It's not that the Principle is true *because* acquaintance gives me the knowledge that its objects exist or because of (Q).

The upshot of this is that Russell's claims about acquaintance and existential knowledge don't straightforwardly lead us to an EC reading of Russell.

6.4

There is one important thing to add to this picture. This picture would only be plausible if constituents of judgement are such that it should not be possible to doubt they exist. If not, (O) will be false. Suppose we held the picture described above but we allowed ordinary objects to be constituents of judgement. It is possible to doubt the existence of any ordinary object. Even if one is currently perceiving an ordinary object, if should always be an epistemic possibility that one is hallucinating. This would be a problem if ordinary objects could be constituents of judgement. We'd have a situation in which it should be possible

_

⁶⁷ For some defence of (P), see footnote 57 above (§5.1).

to judge or entertain the possibility (in a singular, non-descriptive way) that an object does not exist, but where this is ruled out by Russell's theory of judgement and his other commitments. (This is why we can make the transition from (N) to (O) in the argument above.)

But this problem is removed if the constituents of judgement are restricted to sense-data and abstract objects. There's good reason to think we cannot doubt the existence of either of these things. I'll just suppose, without argument, that it's not possible to doubt the existence of abstract objects like universals and logical operators. We can also give some reason to think it is not possible to doubt the existence of sense-data. This doesn't require us to make any particularly strong assumptions about the nature of sense-data: that they are inherently private, or mind-dependent, or whatever. Nor does it obviously require us to commit to any special epistemic features of the acquaintance relation itself, related to the existence of its objects. Rather, just like in \$5 and in the case of identity, the claim that we cannot doubt the existence of sense-data flows from their functional role. If it is part of the functional role of sense-data that they can serve as the basic, particular constituents of judgement, and fulfilling this functional role requires it is impossible to doubt the existence of sense-data, then this provides some reason to claim that sense-data are such that it is not possible to doubt their existence.

6.5.

To summarise my argument in this section: Russell's claims about acquaintance giving us knowledge of existence do not force us to accept an EC reading. There is a way of understanding these claims that is consonant with a non-EC reading. On this understanding it's not that acquaintance provides some positive epistemic status to judgements asserting the existence of its objects, rather it's just automatically impossible to doubt the existence of any constituent of judgement and thus any object of acquaintance, because any singular judgement asserting their non-existence is unframeable. And this position is made acceptable by restricting constituents of judgement (and thus objects of acquaintance) to non-ordinary entities.

7. Conclusions

There are two key lessons I want to draw from this chapter, beyond a more general interest in understanding Russell's acquaintance view. The first lesson is that an

acquaintance view that allows acquaintance with ordinary objects, like AV, faces two prima facie puzzles regarding identity judgement and existential judgement. I said that Russell's theory of judgement commits him to the idea that ordinary objects cannot be constituents of judgement. This is because of the puzzles related to identity judgement (§5) and existential judgement (§6). All objects of acquaintance are potential constituents of judgement, so Russell is thereby committed to the idea that ordinary objects cannot be objects of acquaintance. This means that AV, which allows acquaintance with ordinary objects, needs some alternative way to solve or avoid these prima facie puzzles, either by abandoning Russell's theory of judgement (and its more modern variants), or in some other way. In short: AV inherits some puzzles from Russell, given that it allows acquaintance with ordinary objects. I will return to this in §4 of the next chapter.

The second lesson is that discussion in this chapter reveals that acquaintance views do not have to be supported by an EC argument. I've argued that Russell himself, the father of acquaintance views, does not offer an EC argument for his acquaintance view. This is a point of similarity between Russell's acquaintance view and my defence of AV. I won't offer any sort of explicit EC argument for AV. Instead, my reasons and motivations for accepting AV will rely on a bold claim about the explanatory role of perception, regarding our most basic capacities for thought about objects in the world. I will return to this in §2 of chapter 5. (That said, I will also not offer Russell's own regress argument (see §3 above) as an argument for AV. This regress argument relies on the idea that acquaintance with a property (or logical operator) is required in order for that thing to be a basic constituent of thought. As I said in §2.4, AV is not committed to this claim.)

Chapter 3: Acquaintance with ordinary objects

1. Introduction

Recall that AV is committed to the following two claims (see chapter 1, §5):

(AV2) Some objects of acquaintance are ordinary objects.

(AV3) A subject is acquainted with an object *o* iff that subject bears at least one of the following three relations to *o*: (i) perceptual acquaintance; (ii) memory acquaintance; (iii) communication-based acquaintance.

I have two aims in this chapter. First, I will motivate and defend (AV2) and (AV3). I will deal with (AV2) in §2 and (AV3) in §3. I will argue that the best account of acquaintance is that acquaintance is perception of an object, memory of an object or standing in a communication chain that bottoms out in perceptual acquaintance or memory acquaintance. To be clear, the claim here is that standing in this sort of communication chain is itself a form of acquaintance. A subject who stands in such a chain that terminates with an object is thereby acquainted with that object. I argue that this account of acquaintance is well-motivated and ensures there's strong unity to the category of acquaintance.

My second aim is to explore some prima facie puzzles that arise as a consequence of adopting (AV2). Given (AV2), AV allows acquaintance with ordinary objects, unlike Russell's acquaintance view. This means that, according to AV, there can be thoughts that are singularly about ordinary objects. But we can be confused or uncertain about the identity and existence of ordinary objects. This leads to three prima facie puzzles for AV, the first two of which are inherited from Russell. The first puzzle is the puzzle of informative identity judgement (see chapter 2, §5); the second puzzle is the puzzle of informative existential judgement (see chapter 2, §6) and the third puzzle concerns singular judgement about the non-existent. I sketch some options for how these puzzles can be solved, but I will not fully resolve the first and third puzzle until part 2 of this thesis. As part of the solution to the third puzzle, I recommend AV should hold that a thought is singular iff it has a singular proposition as its content. This claim will be important in my next chapter.

2. AV should allow acquaintance with ordinary objects

The acquaintance view I will defend in this thesis, AV, allows acquaintance with ordinary objects, unlike Russell. Any acquaintance view that has a chance of being attractive to twenty-first century readers should and must allow this.

One reason why AV should allow acquaintance with ordinary objects is that, if an acquaintance view didn't allow acquaintance with ordinary objects, that view would be straightforwardly committed to the idea that we cannot entertain singular thoughts about ordinary objects. But this isn't plausible. After all, I motivated discussion of singular thought via examples that involved singular thought about ordinary objects. However we should be careful with this line of reasoning. As we will see several times in this chapter, an acquaintance view should be careful about claiming acquaintance views are plausible only if acquaintance has such-and-such a nature and scope, therefore acquaintance has this nature and scope. Given the dialectic here—given this is a defense of an acquaintance view, AV—this kind of inference could appear illegitimate, ad hoc or circular. After all, 'acquaintance' is a technical term and also a somewhat slippery notion. (I'll expand on these claims in the next section.)

Given this, it's important that there is an extra, independent reason to allow acquaintance with ordinary objects. Here is such a reason: perception is the paradigm example of acquaintance, and Russell's indirect realist philosophy of perception is no longer a mainstream view. The mainstream view is that perception does put us into immediate or direct contact with ordinary objects. On this view, arguments from illusion and hallucination do not demonstrate that this position is untenable. To be clear: holding this does not require one to hold a naïve realist view of perception. Rather, this mainstream view comes in at least two flavours. On one view, perception represents ordinary objects in our environments. On the view, this representation counts as immediate or direct perception of ordinary objects. So perception allows us to come into contact with or encounter ordinary objects. This view is often called intentionalism or representationalism about perception. On the other view, perception is simply a relation to ordinary objects in our environments. (This view preserves Russell's idea that perception has a relational structure.) This view is often called naïve realism or relationism about perception. I won't

⁶⁸ Proponents of this view include Harman 1990, Tye 1995, Dretske 1995, Byrne 2001, Siegel 2010.

⁶⁹ Proponents of this view include Brewer 2011; Campbell 2002; Soteriou 2013; Martin 2002, 2006.

discuss which of these we should prefer here, nor whether holding an acquaintance view forces one to accept the relationist view. However, if we accept one of these two positions—and agree that perception is an example of acquaintance—then we should accept that at least perceptual acquaintance is acquaintance with ordinary objects. This is sufficient to establish (AV2).

3. An account of acquaintance with ordinary objects

3.1

The most popular account of acquaintance with ordinary objects in the recent literature claims that acquaintance is perception of an object, memory of an object or standing in a communication chain that bottoms out in perceptual acquaintance or memory acquaintance. As I've said, this will be my preferred account of acquaintance for AV. In this section, I will explain why this is the best account of acquaintance. In §3.1 I will argue that acquaintance should be extended at least this far. In §3.2 I will argue acquaintance should not be extended further.

It is clear that, for AV to be plausible, acquaintance must extend beyond perception and perceptual memory. This is indicated by one of the core cases of singular thought from the very start of this thesis (chapter 1, §2). In the President Tyler case, you didn't ever have any perceptual contact with John Tyler. Nonetheless, I claimed that one of your thoughts about him was singular. (Given my preferred account of singular thought, this is not just an intuition about a case; it is a theoretically motivated verdict. Most accounts of singular thought will agree this thought is singular.) So if acquaintance is required for singular thought, as any acquaintance view claims, then acquaintance must extend beyond perception and memory.⁷¹ The next natural extension for acquaintance is to say that acquaintance can be acquired and transmitted through testimony and communication.

⁷⁰ For example, see Bach 1987, 2010 and Recanati 2012. Jeshion (2010, p.109) calls this the 'Standard-Standard on Acquaintance' although she does not endorse an acquaintance view.

ver perceived John Tyler in the flesh, there are photographs and portraits of him. I see little reason to deny that in seeing a photograph of John Tyler, you *in some sense* perceive or see John Tyler. And I see little reason to deny that this could count as a form of perceptual acquaintance with John Tyler. If perceptual acquaintance is extended to include photographs and the like, does this avoid the worry above? I don't think so. We still need acquaintance to extend beyond perceptual and memory acquaintance. It doesn't seem right to say that seeing a photograph of John Tyler is a necessary condition on entertaining a singular thought about him, especially if, for example, one has full competence with the name 'John Tyler'. It also doesn't

That said, there is some danger for AV lurking in this line of reasoning. As above, AV should be careful about inferring: acquaintance views are plausible only if acquaintance has such-and-such a nature and scope, therefore acquaintance has this nature and scope. In particular, AV should be careful about inferring the presence of a new type of acquaintance relation to an object from the fact that it seems we can entertain a singular thought about that object. AV should be careful about reverse-engineering an account of what acquaintance is to match intuitions about whether or not certain thoughts are singular. This sort of reasoning presents a danger that AV could become undermotivated and ad hoc. In order for AV to be a well-motivated view, in good standing, it should give a principled, theoretically motivated account of what acquaintance is. This account must ensure that there is sufficient unity to the notion of acquaintance, which justifies grouping these relations together and labelling them 'acquaintance'. Then it should defend the claim that acquaintance is required for singular thought. It should avoid reasoning in the other direction and retrofitting or gerrymandering an account of acquaintance to deal with all apparent cases of singular thought.

To put this point in another way, there will be a temptation for AV to respond to some apparent counterexamples—cases in which it might seem that we have singular thought in the absence of acquaintance—by piecemeal extending the notion of acquaintance.⁷² Given my comments above, this temptation should be avoided. The danger is that AV ends up as undermotivated, because there isn't enough unity to the notion of acquaintance. If more-or-less anything can count as acquaintance, such that there's no unity to the category, then AV will be undermotivated and uninteresting. There will be little reason to think that acquaintance is a useful or explanatory concept when theorising about our capacities for thought.⁷³

seem right to say there can be no singular thought about long-dead historical figures of whom there are no surviving photographs or portraits. A proper discussion of depiction in pictures and photographs would take us too far afield here. For the view that we do literally see people in photographs, see Walton 1984; cf. Cohen and Meskin 2004, Currie 1991. For a helpful overview of the topic, see Costello and Phillips 2009.

⁷² For discussion of this sort of reasoning, see especially Goodman 2018.

⁷³ We can see an echo of this worry in a recent discussion of Russell on acquaintance by Mike Martin (2015, pp.35-36ff.; also see Martin 2020, p.101). Martin contrasts two ways of understanding Russell's view on acquaintance. There is a non-explanatory *bookkeeping* notion of acquaintance and an explanatory *empiricist* notion of acquaintance. Martin claims that Russell equivocates between these two understandings of acquaintance and that this is a problem for his view. Martin claims we find a bookkeeping notion of acquaintance in Russell's rather odd views on memory acquaintance and in his discussions of whether not we are acquainted with the self. (Russell seems to take the answer to the question of whether or not we are acquainted with the self to be solely determined by whether the self can be a constituent or term of

I will argue that my preferred account of acquaintance—given by (AV3)—can avoid these worries. There are reasons to adopt it that go beyond a desire to avoid apparent counterexamples. I will take it as obvious that perception and perceptual memory should count as acquaintance. The task here is to argue that communication-based acquaintance should also count as acquaintance.

We can think of AV's preferred account of acquaintance as having three tiers.

- At **tier one** we have perceptual acquaintance. This is the basic, paradigm instance of acquaintance.
- At tier two we have perceptual memory acquaintance. This takes the type of
 acquaintance at tier one and extends it. Here we construe perceptual memory as a
 faculty that (in part) retains acquaintance with previously perceived objects, within
 a single subject's cognitive system. This acquaintance is ultimately based on
 perceptual acquaintance.
- At **tier three** we have communication-based acquaintance. This takes the types of acquaintance at tier one and tier two and extends them. Here we construe communication as a faculty that (in part) spreads acquaintance throughout a linguistic community. This acquaintance is ultimately based on perceptual acquaintance (perhaps via memory acquaintance).

It is natural to elaborate communication-based acquaintance in terms of something like Kripke's causal theory of names (1980). We can think of someone that has communication-based acquaintance with an object as standing in a communication chain that bottoms out in perceptual acquaintance with that object.

We can present Kripke's causal theory of names as having two components: one concerning reference-fixing and one concerning reference-transmission.⁷⁴ The reference of a name is initially fixed via a dubbing or baptism. This will usually be grounded in

-

judgement.) The general thought is that, when we move away from perceptual acquaintance, there's a danger we switch to a bookkeeping notion of acquaintance. This doesn't give sufficient unity between perceptual acquaintance and other forms of acquaintance. This undermines the idea that acquaintance is a genuine, interesting, explanatory concept to appeal to when theorising about our capacities for thought.

⁷⁴ I draw here on a clear and helpful summary by Eliot Michaelson and Marga Reimer (2019). This presentation of the causal theory of names involves quite a bit of idealisation. The causal chains it appeals to can plausibly split and/or merge in complex ways. For classic discussion of this sort of thing, see Evans 1973. I'll presume that these issues can ultimately be solved by a causal theory roughly similar to Kripke's. For a little more discussion of these idealisations, see chapter 5, §4.2.

perception or memory of an object. To Once the reference of a name is fixed in this kind of way, the name can be transmitted from speaker to speaker in a linguistic community via communication. Suppose speaker S picks up a name N' in this kind of way. S succeeds in referring to the referent of N' because their use of N' is underwritten by a causal chain that stretches back to the initial dubbing of N with the name N'. It is not required that S know anything about the previous links in the chain or about the dubbing. It is not required that S have any means of identifying the referent of N' other than as 'the referent of N'. All that is required is that S is hooked-up to a causal chain that leads back to N and that she intends to use the name N' with the same referent as the person she learnt it from.

According to AV's account of acquaintance, if the initial dubbing is based on perceptual acquaintance or memory acquaintance, then acquaintance with that object is transmitted across these communication chains. If you gain the capacity to use a name in this way, you become acquainted with the referent of that name. You retain this acquaintance as long as you retain the capacity to use the name. This acquaintance bottoms out or can be traced back to—perhaps in some very remote way—paradigmatic, tier 1 perceptual acquaintance with the object. According to AV, this communication-based acquaintance allows you to entertain singular thoughts about the object; it explains your capacity to think these singular thoughts.

The fact we can build-up communication-based acquaintance from perceptual acquaintance in a tiered, iterative way indicates that there is some significant unity to this notion of acquaintance. The second and third tiers build on the previous tiers. Unlike perceptual acquaintance and memory acquaintance, communication-based acquaintance doesn't bring an object immediately before a subject's mind. But, via the wonders of linguistic communication, it does connect-up a subject, via a causal chain, to a different subject who *did* at some point have the object directly before their mind. That is to say, ultimately communication-based acquaintance with an object bottoms out in paradigmatic, perceptual acquaintance of that object. All this indicates there is at least some significant unity to a notion of acquaintance that includes perceptual acquaintance, memory acquaintance and communication-based acquaintance.

⁷⁵ Dubbings can also fix the reference of the name via description. AV does not hold acquaintance is transmitted from this kind of reference fixing. I will discuss this in detail in chapter 5, §4.

In addition, given an acquaintance view, there are principled, theoretical reasons to accept that communication-based acquaintance should count as a kind of acquaintance. These reasons go beyond a desire to respond to apparent counterexamples. It's a natural thought that our linguistic capacities and our capacities for communication extend the range of objects that we are able to think about beyond our immediate environments. That is a key part of the function and purpose of our linguistic capacities. Our most basic capacities to think about objects in the world are underpinned by perception (and memory). Communication extends these capacities to a wider range of objects, including objects that are physically distant and temporally distant. According to a view like AV, all our capacities to think singular thoughts about objects are underpinned by acquaintance. So, given this role of communication in extending our thoughts, it is unsurprising that acquaintance can be transmitted via communication chains, according to AV. And it is unsurprising that acquaintance, and these chains, bottom-out in perception.

As such, I think my preferred account of acquaintance provides a neat, theoretically motivated and reasonably unified account of acquaintance, one that extends beyond perceptual acquaintance. It's not the case that the only reason to extend acquaintance beyond perception and memory is that this would avoid obvious counterexamples. Once we allow acquaintance with ordinary objects, there are theoretical reasons to extend acquaintance to include communication-based acquaintance. Also, by doing this, we don't end up with a disunified or gerrymandered view.

3.2

In §3.1 I gave some reason to think that (AV3) gives the *necessary* conditions for acquaintance. The scope of acquaintance should extend at least as far as (AV3). In this section I will argue we should not extend acquaintance further. I will argue (AV3) gives the *sufficient* conditions for acquaintance. To do this, I will argue that the next most natural extension of acquaintance (beyond perception, memory and communication-based acquaintance) falls prey to the disunity and undermotivation worries I raised in the previous section.

It is sometimes claimed that thoughts like those expressed in the following cases are singular.

Footprints: As I run down the beach I see a set of very large footprints in the sand, and say 'He has big feet'.

Bearprint: A group of people go camping. After setting up the tent they go down to the stream where they see a grown bear's footprints. Later, after supper, they see fresh bear scat. Knowing that bears are solitary and territorial, one of them says, 'I think we should get off his turf.' (Sawyer 2012, p.267)⁷⁶

Suppose for the sake of argument that we agree the thinker entertains singular thoughts in these cases. And suppose we hold an acquaintance view. In that case we're going to have to say that the thinker bears an acquaintance relation to the beach walker and the bear in these cases. Sarah Sawyer claims that these cases show we need to introduce a new kind of acquaintance relation:

This new kind of acquaintance involves mediated causal contact through perceived effects such as footprints and wobbles in orbits. I will refer to the perceived effects of objects as evidential traces and will refer to the form of acquaintance based on an evidential trace as 'trace-based' acquaintance (2012, p.277)

If we take on board Sawyer's suggestions, we could say the subjects in the cases above bear the relation of trace-based acquaintance to the beach walker and the bear. So there's no problem, on this acquaintance view, with agreeing that the thoughts in the cases are singular.

However, I think AV should reject the claim that this counts as acquaintance and should avoid reasoning in this way.⁷⁷ I think this is an instance of piecemeal extending the notion of acquaintance just to avoid counterexample cases. There is little reason to think that this trace-based relation and the paradigm examples of acquaintance (e.g. perception and memory) form a unified kind, worthy of the label 'acquaintance'.

⁷⁶ The cases are originally Jeshion's (2010). Jeshion herself thinks that whether or not we have a case of singular thought depends, roughly, on how significant or interesting the object is to a thinker. She ends up claiming *Bearprint* involves singular thinking but *Footprints* does not.

⁷⁷ Ultimately I think that it's unproblematic to deny the thoughts are singular in the footprint or pawprint cases. This claim doesn't need to rest on intuitions about the cases; it can be theoretically motivated. Given my preferred aboutness without properties account of singular thought (see chapter 1), it is plausible to claim the thoughts are non-singular, since they involve a descriptive or non-relational mode of identification of an object.

There are at least two crucial differences between the paradigm examples of acquaintance and Sawyer's trace-based relation. These substantiate my disunity claim above. The first difference is that the paradigm instances of acquaintance involve perception of the object of acquaintance, or they can be traced back to such perception. But Sawyer's trace-based relation need not at all involve perception of the object in question. In principle, someone could bear Sawyer's trace-based relation to an object even if no one has ever directly perceived this object. The second difference is that Sawyer's trace-based relation involves inference, whereas paradigm instances of acquaintance are non-inferential. When Sawyer's trace-based relation holds, we see a causal trace of an object, then infer the existence and nature of the object responsible for the trace. This seems far-removed from perception or perceptual memory of an object, where the object, as it's often put, is directly before the subject's mind. As such, there is little reason to treat Sawyer's trace-based relation as acquaintance, except that it helps deal with apparent counterexamples to acquaintance views. If we treat this as acquaintance, we'll face the disunity and undermotivation issues discussed above.

It might be objected that these worries also apply to my notion of communication-based acquaintance from §3.1 above. But I don't think this is correct. Communication-based acquaintance is certainly a less direct and more mediated relation than the relation of perceptual acquaintance. But unlike Sawyer's trace-based relation, communication-based acquaintance does trace back to perception *of* the object of acquaintance. It can be built up in a tiered and iterative way from perceptual acquaintance. As I said above, although communication-based acquaintance doesn't bring an object immediately before a subject's mind, it does connect-up a subject, via a causal chain, to a different subject who *did* at some point have the object directly before their mind.

In addition, communication-based acquaintance doesn't involve inference. Or, at least, it doesn't involve explicit or conscious inference. I said above that if we come into contact with an object by perceiving some causal trace of that object, we must infer the existence

_

⁷⁸ There's a slight complication here. On some theories of perception, some instances of perceiving a causal trace of an object can count as perceiving *that object*. (For example, there are all kinds of complications involving smell and sound that I cannot get into here.) If so, in these cases we would just have an ordinary case of perceptual acquaintance. There is no need to introduce a new kind of trace-based acquaintance for these cases. That said, I think that on most mainstream theories of perception, the two example cases above would not count as perception of the bear or of the person.

⁷⁹ Genone (2014, p.19, footnote 22) makes a similar point.

and nature of the object from the trace. I'm claiming this is an explicit, conscious, 'personal-level' inference.80 The success of this inference requires some understanding of cause and effect. It requires some understanding of the potential activities and states of the object in question. It requires some understanding of the passage of time and the impact this might have on the environment in which the trace is found. All this can be pretty complex. It takes skill and training to get really good at these kinds of inferences. Think, for example, of skilled animal trackers, detectives, astronomers or particle physicists. The same is not true when we come into contact with an object by hearing a name of that object. Anyone with basic communication capacities can get hooked up into a name's causal chain in the appropriate way. As such, unlike in the causal-trace case, it doesn't seem right to say that these communication capacities depend on explicit (and potentially complex) inferences. After all, young children who are incapable of making complex inferences can have relatively sophisticated communication capacities. In particular, they have sophisticated capacities to pick up, use and pass on names. If inference is involved in these naming capacities, it is more plausibly 'sub-personal', automatic or implicit inference that (somehow or other) occurs in the subject's language system. 81 As such, I argue that communication-based acquaintance is non-inferential in the relevance sense. We don't face the same disunity or undermotivation objections that we face when we consider extending perceptual acquaintance with Sawyer's trace-based relation.

The conclusion I wish to draw here is that (AV3) is motivated and defensible. It extends acquaintance far enough, but not too far. Next I will explore some consequences of allowing acquaintance with ordinary objects, drawing on my discussion of Russell in chapter 2.

4. Three puzzles

Three prima facie puzzles or problems arise for AV, given that it allows acquaintance with ordinary objects and thus singular thought about ordinary objects. AV needs to solve or dissolve these problems. As part of my defence of AV, I will suggest how it can do this.

-

⁸⁰ For the personal/sub-personal distinction see Dennett 1968.

⁸¹ Perhaps it's plausible that non-human animals *can* engage in implicit or unconscious (or sub-animal?) causal trace inferences. After all, conceptually unsophisticated animals can be very skilled at tracking. Perhaps this is because some non-human animals have very different perceptual capacities to ours. I would speculatively suggest we should say that some non-human animals can directly perceive objects via causal traces (see footnote 78 above (p.83)), due to their far more sophisticated sense of smell.

First, we have a puzzle about informative singular identity judgement. Second, we have a puzzle about informative singular existential judgement. Third, we have a puzzle about judgements that seem to be singularly about non-existent objects.

The first and second puzzles are inherited directly from Russell. As I argued in chapter 2 (§5 and §6), Russell restricted acquaintance with particulars to sense-data, and denied sense-data are ordinary objects, in part because of these puzzles. The first puzzle (the identity puzzle) is contingent on holding something similar to Russell's theory of judgement. It indicates that AV must modify or abandon this. The second and third puzzles are more-or-less independent of which particular theory of judgement AV adopts.

All three puzzles are discussed widely outside the context of acquaintance. To some extent, these are puzzles for everyone. However, all three puzzles bite particularly hard for AV. For all three puzzles, this is partly because AV will be strictly committed to all singular thoughts being non-descriptive. More precisely, given its account of singular thought, AV is committed to the idea that all thoughts that are singularly about an object do not identify that object solely via a descriptive mode of identification. This means that descriptivist solutions to the three puzzles are not available to AV. For the second and third puzzle, the puzzles also bite particularly hard because AV is committed to the idea that a subject can entertain a thought that is singularly about an object o in a world w only if o exists in w. Let's look at the puzzles in a bit more detail.

5. Identity judgement about ordinary objects

In chapter 2, §5 we saw that Russell's theory of judgement commits him to the idea that identity confusions are impossible with respect to all constituents of judgement, and thus all objects of acquaintance. But clearly identity confusions are possible regarding ordinary objects. For example, ordinary objects are usually reencounterable. The upshot of this is that, since AV allows acquaintance with ordinary objects, it needs to solve or side-step the problem of singular informative identities, without any appeal to descriptivist solutions to this problem. For example, AV may need to replace or modify Russell's theory of judgement. This point doesn't specifically apply to just Russell's multiple-relation theory.

_

⁸² The more precise gloss is necessary since it is possible for a singular thought to be singularly about some objects and non-singularly about others. Actually it is possible for a singular thought to be both singularly about one object and non-singularly about that object. Hence the 'solely' in this gloss.

It will apply to any similar theory of judgement where, roughly speaking, judgements are individuated by the objects and properties they are about.

I'm actually going to save any further discussion of this puzzle until part 2 of this thesis. Exploring which theories of judgment AV could adopt here will take considerable work, which I will explain in chapter 6 and carry out in chapters 7 to 9.

6. Existential judgement about ordinary objects

6.1.

There is a parallel problem of informative existential judgement that arises if we allow acquaintance with ordinary objects and thus singular thought about ordinary objects. AV needs to give an account of existential judgement that can deal with the fact that we can doubt the existence of an object and can find out that an object exists. Let's call this the problem of informative existential judgement.

As we saw in chapter 2, §6, Russell solves this problem by saying that all existential judgements are descriptive judgements. This quite easily allows them to be informative and non-trivial. He also holds that all singular existential judgements are nonsense or meaningless. This solution to the problem is bolstered and made plausible by Russell's commitment that the basic constituents of judgements are such that genuine questions about their existence simply cannot arise. So there's no need for Russell to give an account of non-descriptive or singular existential judgement. However, it is clearly possible to doubt the existence of ordinary objects. AV—given (AV2), i.e. that it allows acquaintance with ordinary objects—faces a prima facie problem here.

Let's quickly recap why Russell thought singular existential judgements (positive or negative) are nonsense or meaningless. The idea is that, if the judgement expressed by 'a exists' has a as a constituent, then either existence is a first-order property (which Russell denies) or else the logical form of the judgement is $\exists x \ x = a$, in which case the judgement is a logical truth and also a priori. But it doesn't seem as if the judgement expressed by 'a exists' should have these properties. Therefore, Russell's claim is that the judgement doesn't have a as a constituent after all. Instead it must be a descriptive judgement about a. We can say something parallel about a negated existential judgement. If the logical form of the judgement is $\neg \exists x \ x = a$, then the judgement is a contradiction and is therefore

uninformative. So, Russell says, the judgement doesn't have a as a constituent after all; it's a descriptive judgement.

Given this Russellian background, there are two saliant ways that AV might initially try to solve the problem of informative existential judgement:

- (A) They could adopt Russell's own solution and say all existential judgements are descriptive, non-singular judgements.
- (B) They could reject Russell's argument that there is a problem with saying that the logical form of singular existential judgement is $\exists x \ x = a \text{ or } \neg \exists x \ x = a$.

As I've already indicated, it's pretty clear that neither of these options are good options for AV. To sharpen this and to inform our discussion going forward, let's consider some concrete cases.

Suppose that I am acquainted with ordinary object a in perceptual experience. At first, I'm fairly convinced that I'm hallucinating, so I make a negative existential judgement about a. Later I come to realise I am not hallucinating, so I make a positive existential judgement about a. If my judgements are singularly about a and the logical forms are $\exists x \ x = a$ and $\neg \exists x \ x = a$, then I've just changed my mind between affirming a simple contradiction and a simple logical truth. This can't be right. So AV shouldn't pursue option (B).

That said, it's actually fairly plausible that I make a descriptive judgement when I make the negative existential judgement in this kind of case. There's something a little odd about my trying to produce a singular judgement about something that I think does not exist, especially if this is a perceptually grounded demonstrative judgement. It's odd for me to judge '*That* does not exist' with respect to an object that I seem to see but which I think doesn't exist. If I think the object doesn't exist, there's no *that* for me to make a judgement about. I don't want to place too much weight on vague intuitions about these cases, but it seems more plausible that, in this kind of situation, I would judge something I would express with 'The thing I seem to see doesn't really exist.' This could plausibly be a descriptive, non-singular judgement about *a*.

Does this just mean we can take option (A) after all, despite what I said above, and say that all existential judgements are descriptive? No, because it's very plausible that my

positive existential judgement in this case could be non-descriptive and could be singularly about a. It would be weird to deny that this singular judgement is not a judgement I could make. In addition, there will be pressure for AV to sometimes account for some form of singular, non-descriptive *negative* existential judgement. Imagine a case in which I am acquainted with a in perceptual experience. I'm fairly certain that I am not hallucinating and that a exists. However, it's at least an epistemic possibility for me that a doesn't exist and that I'm just hallucinating. So this must be a possibility that I can, in some sense, frame to myself. Plausibly being able to frame this possibility requires me to be able to make the judgement that a does not exist. I don't think we should commit to the idea that I must frame this possibility in terms of a descriptive identification of a in every case. I should be able to frame this possibility in a way that is singularly about the object in question. And again, if this is a genuine possibility that I'm framing to myself, presumably the logical form here can't be $\neg \exists x \ x = a$ where this is a contradiction. That's not a genuine possibility in any sense.⁸³

As such, AV cannot just adopt Russell's solution to the problem of informative existential judgement (say all existential judgements are descriptive (this is option (A) above)) nor the main solution Russell rejects (say existential judgements are contradictions or tautologies, when they're not descriptive (this is option (B) above)).

Unlike in the case of informative identities in §5, it's not obvious that it'll help if AV replaces Russell's theory of judgement. For example, extra fineness of grain in the content of judgement won't clearly help here. Extra fineness of grain won't prevent $\neg \exists x \ x = a$ from being a contradiction or $\exists x \ x = a$ from being a tautology. To make progress here, we need to reject the idea that options (A) and (B)—or some combination of them—are the exhaustive options for AV.

Before we get onto this, I'd like to answer the question: Why is this puzzle particularly a puzzle for AV? Well to some extent this is a problem for everyone that allows singular thought about ordinary objects. But I'd like to reemphasise that it bites particularly hard for AV, since AV thinks it really matters whether or not these existential judgements are

⁸³ We could make a parallel argument about metaphysical possibility. Suppose that I encounter an ordinary, contingent object. Surely I should be able to judge 'this might not have existed', in the sense that there is a possible world in which this object doesn't exist. And surely this judgement would be true. But how can this be so if the content of my judgement is the negation of a logical truth, in the scope of a modal possibility operator? There are no possible worlds in which logical truths are false, surely.

singular or non-singular (for AV this is a fundamental psychological distinction). Also, according to AV, given (AV4), any existential judgement that identifies its object in a descriptive or satisfactional way is definitely *not* singularly about the object in question. Finally, as we'll shortly see, the problem is particularly hard to solve for AV, given that there can be no acquaintance with the non-existent.

6.2.

I actually don't think there are any totally ideal options for AV here. However, I will explore one way AV can solve the problem. ⁸⁴ We can resist the idea that the logical form of singular existential judgement is either a tautology or a contradiction. Suppose a is an object of acquaintance, AV could:

- (i) Say the logical form of singular existential judgement is indeed $\exists x \ x = a$ or $\neg \exists x \ x = a$, but adopt a free logic and deny that $\exists x \ x = a$ is a logical truth and that $\neg \exists x \ x = a$ is a contradiction.
- (ii) Say, contra Russell, that existence is a primitive first-order property of objects and that there is a first-order existence predicate. So the logical form of singular existential judgement is Ea (or $\neg Ea$). We combine this with a free logic, in part so that $\neg Ea$ doesn't entail $\exists x \neg Ex$. (By 'primitive' here I roughly mean that this existence property is not just the property $\lambda x (\exists y \ y = x)$. Otherwise, this would just be the same as option (i).)

I don't want to take a stand on whether existence is a first-order property that corresponds to a first-order predicate.⁸⁵ I actually don't think this will make a huge amount of difference here. Even if existence is a first-order property, then presumably it's a property that is true of everything at each world. So option (ii) doesn't straightforwardly allow us to say that existential judgements are informative and that negative existential judgements encode genuine epistemic possibilities.

⁸⁴ There is a large and interesting literature on existential judgement. See, e.g., Wiggins 1995; Evans 1982, chapter 10; Mackie 1976, Dummett 1993; Crane 2013. This literature is most directly (although not exclusively) concerned with empty negative existential judgement about the non-existent and aims to make sense of sentences such as 'N does not exist' where 'N' is an empty name. The problem I'm discussing here is a little different. I'm really concerned with how judgements expressed by sentences such as 'N does not exist' or 'N exists' can be informative, when N does exist.

⁸⁵ For some argument that there's little problem with this idea, see, e.g. Evans 1982, 345-348ff; Mackie 1976; Crane 2013, pp.34-34; Soames 2010, p.31; Salmon 2014; Thompson 1967

Before we move forward, let me say something brief about free logic. 86 There are at least two free logics AV could adopt here.87

First, there's negative free logic according to which $\exists x \ x = a$ and Ea are false whenever a does not exist (really we should say: whenever the interpretation of 'a' is empty or undefined). So on this view $\exists x \ x = a$ can be false and $\neg \exists x \ x = a$ can be true. The former is not a logical truth, the latter is not a contradiction. Equally, on a negative free logic, even if 'E' is a predicate that is satisfied by everything, Ea can be false and $\neg Ea$ can be true.

Second there's neutral free logic according to which $\exists x \ x = a$ and Ea are undefined whenever the interpretation of 'a' is empty. We can think of being undefined as a matter of receiving a third truth-value. So on this logic both $\exists x \ x = a$ and $\neg \exists x \ x = a$ can be undefined. Note that the former cannot be false and the latter cannot be true. Still, neither is a logical truth or a contradiction. Equally, even if 'E' is a predicate that is satisfied by everything, Ea and $\neg Ea$ can fail to be true: they can be undefined.

I'll stick to the bivalent negative view. In a sense, this view is simpler. How can all this help with the problem AV faces here?

Well things are complicated by a key commitment of AV that has been hidden so far. Any acquaintance view is committed to the idea that a subject can entertain a judgement that is singularly about an object o only if the subject is acquainted with o. It's natural to augment this commitment as follows: a subject can entertain a judgement that is singularly about an object in a world w only if the subject is acquainted with o in w. If we accept that a subject can be acquainted with an object in a world only if that object exists in that world,

won't hold that sentences containing empty names can express a proposition or have a truth-value. But this is too quick. All an acquaintance view is committed to is that sentences containing empty names don't express singular propositions. This is compatible with the idea that they might express some proposition and have a truth-value. So, for all we've said so far, an acquaintance view such as AV could employ free logics to account for the semantics of empty names.

⁸⁶ It might be immediately objected that it is hard to understand why AV would have any need for or be interested in free logics. Outside of logic itself, the main motivation to adopt a free logic is to account for empty names. As we'll see shortly, it's clear that no acquaintance view can allow singular judgement about the non-existent. So, we might think, AV will not be interested in giving a semantics for empty names and it

⁸⁷ There is also positive free logic, which I won't discuss here. See Lambert 2001 for an overview of free logics. Sainsbury (2005, 2018) and Burge (1974) endorse a negative free logic when writing about issues that are broadly related to our concerns here. Neutral free logic is often associated with Frege (e.g. 1892). Free logics will come up again in chapter 7 below.

which seems natural, it will follow that a subject can entertain a judgement that is singularly about an object o in a world w only if o exists in w. So if o doesn't exist in a world w, then there are no judgements entertainable in w that are singularly about o.

On a negative free logic we said there could be false judgements with the logical form $\exists x \ x = a$ or Ea. However, on any acquaintance view, the above tells us that any judgement with the logical form $\exists x \ x = a$ (or Ea) that is false in a world will be nonentertainable in that world. Equally, on a negative free logic, there can be true judgements with the logical form $\neg \exists x \ x = a$ (or $\neg Ea$). However, on any acquaintance view, any judgement with this logical form that is true in a world will be non-entertainable in that world.

Where does this leave AV's account of informative existential judgement? I think AV just needs to bite a bullet here. Given we can't be acquainted with objects that do not exist, the most AV can do to solve the problem is to say that:

- Positive singular existential judgements do not have tautological logical form and can be false at some worlds. In this sense they are non-trivial and informative. However they are never both entertainable and false in a world.
- Negative singular existential judgements do not have contradictory logical form and can be true at some worlds. In this sense they are non-trivial and informative. However they are never both entertainable and true in a world.

The idea here is that, if a subject makes a positive singular existential judgement which is singularly about o in w, then o must exist in w, and thus the judgement must be true. Suppose that the content of this judgement is p. On the view sketched here, p exists and is false in any world w^* in which o does not exist. However, p is not entertainable in any such world w^* . Equally if a subject makes a negative singular existential judgement which is singularly about o in w, then o must exist in w and thus their judgement must be false.

_

⁸⁸ Strictly speaking the above only tells us that any judgement with the logical form $\exists x \ x = a$ or Ea that is false in a world will be non-entertainable in that world *if the judgement is singularly about a in that world.* In principle an acquaintance view can allow that a judgement with logical form $\exists x \ x = a$ or Ea (or their negations) can be entertainable in a world in which the referent of 'a' does not exist, as long as that judgement isn't singularly about the referent of 'a' in this world. I suspect that the theories of judgement that are attractive to an acquaintance view would rule out this possibility, so I won't pursue it any further here.

Suppose that the content of this judgement is p'. p' exists and is true in any world w^* in which o does not exist. However, p' is not entertainable in any such world w^* .

Let's reconsider the case from §6.1 in which I am acquainted with object o in perceptual experience and change my mind about whether I'm hallucinating. On the view we've ended up with, I am not changing my mind whether I affirm a contradiction or a tautology. So that's some progress from Russell's initial problem. On the view we've ended up with I change my mind from a contingent, false, descriptive negative existential judgement, expressed by something like 'The thing I seem to see doesn't exist' to a positive, singular existential judgement ('That does exist'). The logical form of this positive singular existential judgement will be Eo or $\exists x \ x = o$. The content of this judgement is not a logical truth, and it is not a priori, since its truth depends on the existence of o. Equally this judgement doesn't have a content that is true at all worlds. However, this positive singular existential judgement has a strange status. My judgement would not be entertainable if o did not exist. The judgement I entertain could never be false and entertainable. An acquaintance view needs to say this is enough to make my positive singular existential judgements somewhat informative and non-trivial.

What about the case in which I am acquainted with o in perceptual experience while I'm fairly certain that I am not hallucinating and that o exists? We want to say I can, in some sense, frame the possibility that o might not exist. Well on the view we've ended up with, the logical form of this judgement is something like $\neg \exists x \ x = o$ or $\neg Eo$ (perhaps including some epistemic modal operator, which I'll ignore). The content of the judgement isn't a contradiction or logical falsity on the view we've ended up with. Equally the content of this judgement is true at some worlds. So that's good. But equally this is not a judgement that could be entertained if o didn't actually exist. AV needs to say this is enough to make my negative singular existential judgement encode a genuine epistemic possibility.

We should recognise that this is not a totally ideal solution to the problem of informative existential judgement. We've made some significant progress by resisting the idea that the logical form of a singular existential judgement is either a tautology or contradiction. But on the view we've ended up with, these judgements are only informative (and only frame genuine epistemic possibilities) in a somewhat strained sense. Nonetheless, I think this kind of solution is the best option for AV and that AV should adopt this solution to avoid the problem of informative existential judgement.

7. Judgement about the non-existent

The third puzzle is somewhat related to the second. The puzzle arises for similar reasons. The puzzle is to account for and make sense of thoughts that (at least purport) to be singularly about the non-existent. As we saw in the previous section, all acquaintance views are committed to there being no singular thoughts about the non-existent. There can be no singular thought about Pegasus or Vulcan on any acquaintance view. But there are some apparent similarities between ordinary singular thoughts about ordinary existing objects and some thoughts that purport to be about the non-existent. Some thoughts that purport to be about a non-existent object purport to be *singularly about* that object. Tim Crane gives a nice example:

[T]here do seem to be straightforward cases where a thinker's thought is aiming to refer to some particular thing which does not exist. I will use a classic example that is all the better for being a real one. The term 'Vulcan' was introduced in 1859 by the French astronomer Urbain Le Verrier as a name for a planet orbiting between Mercury and the Sun. Le Verrier had previously discovered the planet Neptune, using much the same methods as he went on to use when hypothesizing Vulcan. Once the name 'Vulcan' was introduced, those who used it were, on the face of it, taking themselves to be talking about (and therefore thinking about) just one object. In many ways their thoughts are similar to thoughts about other, existing planets—'Vulcan might appear tonight' seems to express a similar kind of thought to 'Neptune might appear tonight', etc. Those who think about Vulcan seem to be having thoughts that are aiming to refer to a particular object just as the thoughts about Neptune are. (Crane 2011, p.24)

'Neptune' and 'Vulcan' are often discussed as examples of names that have their reference fixed by description. This aspect of the example won't be helpful here. In this

⁸⁹ I said above that this puzzle—as with the other two puzzles—is a consequence of allowing acquaintance with ordinary objects. How so? If we only allow acquaintance with non-ordinary objects, about whose existence there can be no doubt, then according to such an acquaintance view, there can only be singular thought about non-ordinary objects (about whose existence there can be no doubt). So, in that case, there would be little reason to suppose there could be genuine instances of thought that purports to be singularly about a non-existent object.

⁹⁰ I want to bracket-off empty thoughts directed at fictional characters or objects. I'll focus on non-fictional empty thoughts. Settling questions about fictional discourse—e.g. whether fictional objects exist, whether make-believe or pretense play some role here—would take us too far afield in this thesis. For realism about created fictional objects, see e.g. Thomasson 1999; for discussion of make-believe and pretence see Evans 1982, Walton 1990. For a different treatment of fictional names, see Sainsbury 2005.

section I'll suppose that 'Neptune' and 'Vulcan' are not descriptive names. ⁹¹ For example, let us suppose that, before 1859, Neptune had been straightforwardly perceived via a telescope, so that there is no question about whether Neptune thoughts could count as singular. ⁹² Let's add to the example that, going against the history of the real case, Le Verrier mistakenly believes that he has observed Vulcan in 1859. What he thought was Vulcan was in fact nothing; a smudge of light caused by a malfunction of his telescope. If we add this detail, we can say that Le Verrier's Vulcan thoughts definitely at least *purport* to be singularly about Vulcan.

As Crane says, the Vulcan thoughts seem to be similar to the Neptune thoughts. They might have a similar cognitive role. A rational subject might be disposed to draw similar (or at least parallel) inferences from them. Recall that AV is committed to the idea that the Vulcan thoughts cannot be singular. Part of the puzzle or difficulty for AV is to account for this similarity, without saying that the Vulcan thoughts are singular. Another part of the puzzle is to make this position independently plausible or acceptable.

We can be more specific about the similarity between the Neptune thoughts and the Vulcan thoughts. To do this, we need to make an empty thought and a non-empty thought about the same object, in the same circumstances. Let w be the actual world. Neptune exists in w. Le Verrier discovered and observed it in 1846. Up until the end of 1846, let w^* be exactly the same as the actual world, except that Neptune does not exist in w^* . (After 1846 w and w^* will diverge since in w^* someone will discover that Neptune doesn't exist after all.) In w^* Le Verrier made the same mistake regarding Neptune that he actually made regarding Vulcan. Let's say that when Le Verrier thought he had observed Neptune with his telescope in 1846 in w^* what he observed was a smudge of light caused by a malfunction.

The key point is this: in w Le Verrier's Neptune thoughts are singularly about Neptune. In w^* Le Verrier's Neptune thoughts at least purport to be singularly about Neptune. Crucially, as we might put it, *from the inside* Le Verrier's Neptune thoughts are

-

⁹¹ I'll discuss so-called 'descriptive names' in much more detail in chapter 5.

⁹² This does seem to accord with the chronology of the real case. Wikipedia says that Neptune was observed via a refracting telescope in Berlin in September 1846. (Apparently it might have been first observed earlier, prior to and independent of Le Verrier's work, but it wasn't recognized as a new planet.)

⁹³ For defence of the idea that the Vulcan thoughts are singular too, see Crane 2010, 2013 and Sainsbury 2005. Crane would say the thoughts are about Vulcan but do not successfully refer to Vulcan. Sainsbury would say that the thoughts refer to Vulcan: his 2005 provides a uniform account of empty and referring singular terms, via negative free logic and homophonic Davidsonian truth theories

indistinguishable across w and w^* . There is no introspectively discernable difference between them. I take it this is why the two Neptune thoughts will have the same cognitive or inferential role.

Back in the actual world: this is part of what explains why our Vulcan thoughts and Neptune thoughts are similar. They both purport to be singularly about a planet. The only introspectable difference between them is that they purport to be about different planets. As such, they appear to be thoughts that are of the same kind.

The fact that two thoughts are introspectively indistinguishable might give *some* reason to think the two thoughts are of the same kind (e.g. that they're both singular or both nonsingular). But it's important to realise this does not *entail* that they are of the same kind. Those with externalist sympathies might be disinclined to accept this kind of inference. We might make a broad comparison with disjunctivism about perception here. 94 There are possible hallucinations as of object o that are introspectively indistinguishable from veridical perceptual experience of o. Some have taken this to show that hallucination and perceptual experience are the same fundamental kind of mental event, where this claim places some constraint on what account we should give of perceptual experience. For example, we might think this claim shows that perceptual experience doesn't put us in direct or genuine contact with objects in the world, since hallucination clearly doesn't do this. Disjunctivists deny that the possibility of perfectly matching hallucination shows that hallucination and perception are the same kind of mental event. The mental event that hallucination and perception have in common—conscious experience—is given a disjunctive analysis: when one has a conscious experience as of o, either one is undergoing a hallucination as of o or one is perceiving o. According to the disjunctivist, the mental events picked out in each disjunct are of fundamentally different kinds. Perception can put us in direct or genuine contact with objects after all.

AV can say something broadly similar about thought that purports to be singularly about the non-existent. Even though the thoughts in the good case (the non-empty case) and the bad case (the empty case) are subjectively indistinguishable, only the thought in the good case is singular. The thought in the bad case is non-singular. So the two thoughts

95

⁹⁴ See, for example, Hinton 1967; Snowdon 1990; McDowell 1982 and Martin 2002, 2004, 2006. Compare the discussion of externalism about mental states in Williamson 2000, and in particular what he claims about the relation between knowledge and belief.

are of different kinds. The fact that the thoughts are subjectively indistinguishable provides *some* reason to say the thoughts of the same kind, but not an unassailable reason.

I should add that it's not the case that the only positive reason to say the thoughts are of different kinds (i.e. one is singular and one is not) is that this would save AV. There is independent support for this claim. There are many ways we might carve up kinds of thinking. But plausibly the semantic features of thoughts are an important factor we should consider when categorising thoughts. And, on the face of things, there is an important semantic difference between the two thoughts above: one is successfully about or refers to an existing object but the other merely purports to do this. ⁹⁵ As such, it is not solely an interest in acquaintance that could lead us to say that the thoughts are of different kinds.

Full consideration of the issue of thought about the non-existent would require a whole thesis. In the remainder of this section I will just sketch one option for AV to defuse this puzzle, in a little more detail, along the lines gestured at above.

We can draw a distinction between two aspects of a thought. On the one hand, we have the propositional content that is entertained. On the other hand, we have the thought episode, which we can say is realised by various thought vehicles or concepts. If AV wants to account for the similarity between the Neptune thought and the Vulcan thought, without saying that both are singular, a natural suggestion is to say that they are similar with respect to one of the aspects above but differ with respect to the other aspect.

If we go with this suggestion, the natural thing to claim is that empty thoughts that purport to be singular and non-empty singular thoughts differ with respect to the kind of propositional content that is entertained, but are similar with respect to the kind of thought episode that occurs (and thus the type of vehicles or concepts that realise that episode of thinking). A more specific suggestion is that genuine or successful singular thought involves entertaining a *singular proposition*. Empty thoughts that purport to be singular do not involve the successful entertaining of a singular proposition. However, in both cases, a similar type of episode of thinking occurs. ⁹⁶ This similarity in the thought episodes can explain why the two thoughts have a similar cognitive role and inferential

-

⁹⁵ Although, as above, see Sainsbury 2005 for a uniform Davidsonian semantics for empty and referring singular terms.

⁹⁶ Proposals in this rough vicinity are discussed by Crane 2011, Genone 2012, Sawyer 2012, Taylor 2010. Only Genone and Sawyer endorse the idea that the empty thoughts don't count as singular.

profile. It can explain why a subject cannot tell from the inside which kind of thought they are entertaining.

On this picture, only successful singular thoughts count as singular. A thought is singular iff it has a singular proposition as its content. So singularity is a property of propositions. Given I've said AV should understand singularity in terms of aboutness without properties, AV should say that aboutness without properties is a property of propositions. I will give an account of this in the next chapter. In addition, on the account just offered, a thought that merely purports to be singularly about an object is not a singular thought, since it does not have a singular proposition as its content. This kind of thought purports to be singularly about an object (and it is similar to thought that *is* singularly about an object) because it is actualised by the kind of concepts and vehicles that *would* actualise a singular thought, in the good case.

This raises the question: what proposition is entertained during an episode of empty thought that purports to be singular? There are different options here. One suggestion is that no proposition is entertained. 97 This won't work if we think that some empty thoughts have a truth-value. On the face of things, some of these empty thoughts should have a truth-value. Another suggestion is that atomic empty thoughts have as their content some course-grained, non-singular proposition that is false at every world. For example, this suggestion could make use of a 'gappy' structured propositions view.98 On this view, the positions that are usually filled by objects in a structured proposition can be left unfilled. If this happens, we have a gappy or unfilled proposition. All atomic gappy or unfilled propositions are false and the negation of any atomic gappy proposition is true. However, there are some clear prima facie problems with gappy propositions. It's not clear this notion really makes sense, on reflection. 99 Settling these issues will require taking a more determinate position on what propositions are. In part two of this thesis I will argue AV is committed to structured propositions. In particular, given certain assumptions, it is committed to structured Fregean propositions. I will return to this issue briefly at the end of chapter 9. I will gesture at a way Fregean propositions can give the solution offered in this section without appeal to gappy propositions. But, even at that point, I won't have any

⁹⁷ For recent defence of this sort of view, see Hodgson 2018, 2022.

⁹⁸ This suggestion originates with Kaplan 1989 (p.496, footnote 23). For defence see Braun 1993, 2005; cf. Exerctt 2003

⁹⁹ For discussion of this, see chapter 9, §9.

particularly strong views about what AV should say about the contents of purportedly singular, empty thought.

8. Conclusions

In this chapter I argued in favour of a particular account of acquaintance with ordinary objects. I motivated and defended (AV2) and (AV3). I also identified three challenges or puzzles that arise for AV, given that it allows acquaintance with ordinary objects. I attempted to solve two of these puzzles. My discussion reveals some commitments and tasks that need to be taken on by AV. To summarise these:

- AV needs to say something in response to the prima facie puzzle of informative identities. (I'll return to this throughout part 2 of this thesis, which I'll set up in chapter 6.)
- AV needs to bite the bullets identified in \$6, in relation to informative existential judgement.
- In order to solve the problem of singular judgement that purports to be about the non-existent, AV should claim that singularity is a property of *propositions*, along the lines discussed in §7. It also needs to give some account of what non-singular proposition is entertained in cases of thought that purports to be singularly about the non-existent. (I'll return to this latter task briefly at the end of chapter 9.)

My next main task in this thesis is to defend (AV1): the claim that acquaintance is required for singular thought. I'll return to this in chapter 5. Before that I will give a full account of singular propositions and of singular thought. I've just argued AV should say singularity is a property of propositions, so I can be more precise and specific about singular aboutness than I was in chapter 1.

Chapter 4: Aboutness without properties

1. Introduction

In this chapter I will give and defend a more precise account of singular thought. I've already said that AV will hold:

(AV4) A thought is singularly about *o* iff that thought satisfies aboutness without properties with respect to *o*.

I said a little bit about what 'aboutness without properties' means in chapter 1, §4.1. In this chapter I will argue for the following way to make this precise:

(SA) A proposition p is singularly about o in w iff (i) for any world w^* : if p exists in w^* , then p is about o in w^* ; and (ii) it's not the case that p is about o in w merely by concerning one or more of o's properties in w.

I will combine (SA) with the following claims, in order to give an account of singular thought:

- A proposition *p* is singular iff there is some object *o* such that: *p* is singularly about *o* in every world in which *p* exists.
- A thought is singular iff it has a singular proposition as its content.

My aim in this chapter is not to argue in favour of the kind of account of singular thought given by (AV4). I already did that, in a somewhat conditional way, in chapter 1 (§4). In chapter 1 I argued that this is a really good account of singular thought and that it can be motivated independent of an interest in acquaintance or in defending AV.

Instead, my aim in this chapter is to convince someone who is broadly sympathetic to (AV4)—but who is open minded about how to cash this out—that (SA) is the best way to understand (AV4).¹⁰⁰ As it stands, (AV4) is too vague. I am in a position to do this work now, because I have just argued that AV should hold singularity is a property of

 $^{^{100}}$ Note that (AV4) does not entail an acquaintance view is correct. We could hold (AV4) without holding AV or any other acquaintance view (see chapter 1, §4.4). There are independent reasons to hold (AV4). As such, I am not defining singular propositions in a way that guarantees AV is true or tailoring this to suit AV.

propositions. My strategy will be to give an account of singular aboutness for propositions. Then I will define singular thought in terms of singular aboutness.

A preliminary point: there are different ways we could go about giving an account of singular aboutness. One option would be to try to define aboutness, from the ground up, then use this definition to define aboutness in the singular and non-singular sense. ¹⁰¹ Another option—which I will pursue here—would be to help ourselves to an intuitive notion of aboutness, and then add an extra condition for singular aboutness. The idea here would be that there's a reasonably precise, intuitive notion of aboutness, that is neutral between singular aboutness and non-singular aboutness. Then we can say that a proposition is singularly about an object o iff it is about o and ______, where we add some extra condition in the gap. We can say a judgement is non-singularly about o iff it is about o but doesn't fulfil the condition in the gap.

This approach adds a complication to our discussion. A proposition p may be about different objects in different worlds. This is very clear for non-singular aboutness. Take a paradigmatic non-singular proposition, one that might be expressed by 'The F is G'. It's plausible to think that this proposition is about different objects in different worlds and that in a world where nothing is the unique F, this proposition is not about anything. This means we have to understand aboutness as relative to a world. And if we define singular aboutness in terms of aboutness, we will have to understand singular aboutness as relative to a world too. So we will have to say: a proposition is singularly about an object o in w iff it is about o in w and w.

2. Glick's proposal

In chapter 1, §4.1, I said that the basic idea behind the aboutness without properties account of singular thought—i.e. (AV4)—is that non-singular aboutness is descriptive or satisfactional aboutness. When a thought is non-singularly about an object, it is about that object because the object happens to have certain properties or satisfy certain descriptions. But when a thought is singularly about an object, the thought is about the object in some

¹⁰¹ For a recent attempt at the former project, see Yablo 2014. His book is really about *subject matter*. This is quite a bit broader than the kind of aboutness we are interested in, which is a relation between a proposition and an object. The book is not primarily concerned with reference, or the kind of aboutness related to this. As such it won't be directly relevant here; or at least, making it relevant would involve a major detour.

stronger more direct sense, not merely qua possessor of properties. ¹⁰² This account combines a negative claim and a positive claim about singular aboutness. The negative claim is that singular aboutness is *not* descriptive or satisfactional aboutness. The positive claim, which is much more vague, is that singular aboutness is direct or strong aboutness. These claims give individually necessary and jointly sufficient conditions for singular aboutness, although they clearly need to be made more precise. When I write of someone broadly sympathetic to an aboutness without properties account of singular thought, I mean someone who is broadly sympathetic to this.

A recent paper by Ephraim Glick (2018) has some helpful suggestions for turning this into an account of singular propositions. (Recall that the label 'aboutness without properties' is borrowed from Glick.) He appears to think that giving a *positive* account of singular, strong or direct aboutness is tricky. Glick's strategy is to define singular aboutness only negatively. He basically claims that singular aboutness is aboutness that is *not non-singular*. Here's a simple suggestion along these lines:

(G1) A proposition p is singularly about o in w iff (i) p is about o in w; and (ii) it's not the case that p is about o in w because o satisfies one or more properties in w.¹⁰³

We need to make this more careful and precise. To show this I will adapt and expand an argument in Glick 2018 (pp.1038-39) against an account of singularity that is similar to (G1). Note that (G1) makes no particular demand about what propositions must be. But on most accounts of propositions, there will be some explanation or account of what makes it the case that a proposition is about an object o (in a world). That is to say, there will be some account or explanation of why (i) is true in (G1). Now note that: for any given proposition p and object o, we can turn this account or explanation of why p is about o in w into a property X such that: if o satisfies X in w, then p is about o in w. For example, if propositions are Russellian, X might be the property $\lambda x(x)$ is a constituent of p). We can use this to argue that no propositions are singular according to (G1). For any proposition p about o in w: p is about o in w because o satisfies X in w. By (G1), this means that p is not singularly about o in w.

In order to solve this problem, Glick modifies (G1) into something a bit more complex. To understand Glick's proposal, we will need to help ourselves to a new notion that is

-

¹⁰² For similar lines of thought, see Recanati 2012, Bach 2010, Glick 2018.

¹⁰³ Glick discusses a similar candidate definition of singularity at p.1039. 'G' is for Glick.

similar and parallel to the *aboutness* relation. Glick calls this the 'concerning' relation, which is a relation propositions can bear to properties. For example, we can say the proposition expressed by 'o is F' concerns the property F and is about the object o. The proposition expressed by 'o is G' concerns the property G and does not concern F. The proposition expressed by 'a loves b' concerns the *loves* relation. The proposition expressed by 'The F is G' concerns both properties F and G and might be about the F. Roughly speaking, we might say that a proposition concerns a property or relation when the property or relation figures in or is involved in the proposition, but the proposition is not *about* the property or relation.

With this notion in hand, we can set out something similar to Glick's own proposal for the necessary and sufficient conditions for singularity (2018, p.1049):

(G2) A proposition p is singularly about o in w iff (i) p is about o in w; and (ii) it's not the case that p is about o in w merely by concerning one or more of o's properties in w.

(To look ahead: as I've said, I will argue that (G2) should not be accepted as a complete account of aboutness without properties. I will argue that the righthand side of (G2) gives a necessary condition for singularity. But there is another necessary condition—roughly, rigid aboutness—that should be added to (G2).)

(G2) avoids the problem above, because property X (the account of why p is about o in w) won't be something that p ordinarily concerns, when p is singularly about o in w. There may be weird propositions that do concern such an X. For example—if we suppose propositions are Russellian—we might consider the proposition expressed by 'o is F and o

¹⁰⁴ I've changed some of the wording of this claim to bring it into line with our discussion so far. Note Glick

w. Note that adding this 'merely' to (G1) would not solve the problem with it discussed above. There are two key changes in (G2) from (G1). First, there's the change from 'because o satisfies one or more properties' has been swapped with 'by concerning one or more of o's properties'. Second, a 'merely' has been added to (G2). The first change deals with the problem with (G1) above. The second change deals with the problems

discussed in this footnote.

doesn't relativise singularity to worlds. The word 'merely' is included so (G2) can deal with the following case (Glick 2018, p.1049): consider a proposition expressed by 'The F is taller than o' in w. Suppose o is the F in w. The proposition is singularly about o and it is non-singularly about o. We want this proposition to satisfy (G2) in w. It does so due to the 'merely' in (G2). The proposition is about o because it concerns a property of o (namely F) in w. But the proposition is about o for more direct reasons too, since it is also singularly about o. Hence the proposition is about o in w not **merely** because it concerns a property of o in

is a constituent of this proposition'. But the reason why p is about o is not that p concerns X (even though p does concern X). Rather it is about o because o satisfies X.

The idea behind (G2) is that when we have non-singular aboutness, a proposition is about an object (in a world) merely in virtue of the fact that the proposition concerns some properties that the object happens to satisfy (in that world). Consider a paradigmatic case of non-singular aboutness. For example, we can consider the proposition most naturally expressed by 'The oldest fox in London is male'. This proposition concerns the complex property $\lambda x(x)$ is the oldest fox in London). Let's call the oldest fox in London in w 'Felix'. This proposition is about Felix in w merely in virtue of the fact that it concerns a property that Felix uniquely satisfies in w. So (G2) entails that this proposition is not singularly about Felix in w. This proposition is also about London in w. But the proposition doesn't concern any properties of London. So it cannot be about London in w in virtue of the fact that it concerns some properties of London. So, the proposition is singularly about London in w. As I said, according to Glick's approach (and thus to (G2)), singular aboutness is non-non-singular aboutness. Our proposition is about London, and it is not non-singularly about London. So it must be singularly about London.

I will take (G2) as the basis of AV's account of singular propositions. In the next few sections I'll justify this by discussing and rejecting some alternative accounts of singular propositions. One striking thing about Glick's proposal is, as I said, it gives a totally negative characterisation of singular aboutness. But someone broadly sympathetic to the aboutness without properties account should hope for some more positive characterisation of singular aboutness. That is to say, they should hope to give some positive characterisation of direct or strong aboutness too. In the next few sections I will consider some ways to do this. I will argue we should only make one minor change to (G2): we should add that rigid aboutness is necessary for singular aboutness.

3. Constituency

Those sympathetic to the aboutness without properties account of singular thought might suggest the following, as an alternative to (G2):

(C): A proposition p is singularly about object o in w iff (i) p is about o in w; and(ii) o is a constituent of p in w.

This is a clear and simple account of singular propositions. It gives a positive account of singular aboutness, albeit one that makes strong assumptions about the nature of propositions, for example that they are structured entities that can have objects as constituents. However, we needn't take talk of constituency too literally here. We shouldn't exaggerate how strong the assumptions made by (C) are. We needn't understand (C) as committing us to a metaphysical claim, for example that objects and properties are literally parts of propositions or that propositions are set theoretic entities, such as ordered tuples. The minimal idea involved in constituency is just a functional dependence between propositions and their constituents, such that any change in constituent gives us a change in proposition, and vice versa. So at a minimum, (C) commits us to a claim about the individuation of propositions, not necessarily about the mereology of propositions.

On the simplest version of a view on which objects and properties are constituents of thought, propositions are Russellian. This means that they are structured entities that have objects, properties and logical operators as immediate constituents. According to this view, for example, the proposition expressed by o is F can be represented with the following structure:

 $\langle o, F \rangle$

(C) entails that this proposition is singularly about 0, because it has 0 as a constituent. This view will account for non-singular aboutness as follows. Suppose proposition q is most naturally expressed by 'The F is G' and that o is the unique F in w. q can be represented with:

 $\langle ?, F, G \rangle$

The position marked with '?' will be occupied by some operator that combines with F in order to make q about the unique F in w. (If we think the semantics of definite descriptions are Russellian, this operator will have something to do with existential quantification. If we don't think this, this operator might take F as its input and output the unique F in each world.) According to proponents of (C) and the Russellian view of propositions, q is about o in w due to the fact that q has as a constituent a property that o uniquely satisfies in w.

_

¹⁰⁵ For this kind of view, see, e.g. Kaplan 1989, Soames 1987, Salmon 1986. Russell himself held this sort of view prior to his multiple relation theory of judgement, although, of course, Russell would deny *ordinary* objects would ever be constituents of propositions.

This brings out that, in a sense, we should not view (G2) and (C) as rival, conflicting accounts of singularity. If propositions are Russellian, then (G2) and (C) will give the same verdicts about which propositions are singular and will give these verdicts for parallel reasons. We can think of (C) as a more determinate manifestation of (G2), if propositions are Russellian.

There are, however, reasons not to adopt (C) as an account of singular thought. More strongly: there are reasons to reject the idea that constituency is either necessary or sufficient for singular thought. We saw that (C) entails a particular account of the individuation of propositions. We saw that it entails that propositions are structured and that propositions can have objects as immediate constituents. We should hope for an account of singular propositions that is more neutral about the nature of propositions. We should hope for an account of singular propositions that can work for various different views about the nature of propositions. For example, we should not give an account of singular thought that makes singular thought immediately or obviously inapplicable on any view that holds either that propositions are unstructured or that they don't have objects as immediate constituents.¹⁰⁶

In addition, there are at least prima facie reasons to think that the Russellian view of propositions underpinning (C) is not correct. This view struggles to cope with singular informative identities, for the same reasons that Russell did. It doesn't individuate propositions with enough fineness of grain. If we think that the problem of informative identities should be solved at the level of propositions, then the Russellian view of propositions will need to be modified or abandoned. This gives extra reason not to define singular thought in terms of (C).

-

¹⁰⁶ That said, in chapter 7 I will argue that my account of singular thought—(SA)—does ultimately commit AV to the idea that propositions are at least structured (but not necessarily to the idea that these structured propositions have objects as immediate constituents). Given (SA), it will turn out that, after some argument, propositions cannot just be unstructured sets of worlds. They need to be individuated with the special fineness of grain given by structure. My point here is that our account or definition of singular thought shouldn't explicitly presuppose a particular view of propositions, like (C) does.

¹⁰⁷ I will discuss whether we should try to solve the problem of informative identities at the level of propositions and content, or at the level of vehicles and concepts, in chapter 6, although I won't take a firm view on either side. My point here is that our account or definition of singular thought shouldn't rule out either approach.

4. Necessary aboutness and object-dependency

4.1

There are some other positive accounts of singular aboutness for propositions, which we might think are in the same very broad spirit as aboutness without properties (especially the positive part of it), but which don't entail constituency or structure. Consider the following plausible, positive claim about singular aboutness: when a subject thinks about an object in the singular sense, their mind gets itself into a configuration that it could only be in if that subject were thinking about this very object. ¹⁰⁸ Two consequences of this are that:

Different Object (DO): if their thought were about another object instead, that subject's mind would be in an importantly different configuration;

Doesn't Exist (DE): if the object in question did not exist, then their mind could not be in this configuration.

The (DO) claim points towards the idea that singular thoughts are rigidly or necessarily about an object. And the (DE) claim points towards the idea that singular thoughts are object-dependent. Each of these claims provide attractive potential positive marks of singularity.

It should be clear that I will not take either necessary aboutness or object-dependency to be *sufficient* for singular thought, individually or jointly. In §4.2 and §4.3, I will explain why neither can provide sufficient conditions for singularity, for anyone who is vaguely sympathetic to (AV4). These arguments bolster my claim that (G2) gives at least a *necessary* condition for singular aboutness. In the next section (§5) I will argue we should add necessary aboutness as a necessary condition for singular aboutness, but that we should not add object-dependency as a necessary condition.

¹⁰⁸ For thoughts vaguely similar to this, see McDowell 1986.

One simple way to make (DO) more precise would be to say that any thought that is singularly about *o* is about *o* in every possible world; or as I will put it, *necessarily about o*. We could express this idea with the following:

(NA): A proposition p is singularly about o in w iff for every world w^* : if p exists in w^* , then p is about o in w^* .

It is clear that anyone sympathetic to an aboutness without properties account of singular thought should reject (NA), because they should deny that necessary aboutness is sufficient for singular aboutness. In short, this is due to rigidified descriptions.

To see this, take a paradigm instance of a non-singular proposition that can be expressed by a sentence of the form 'The F is G'. Call this proposition q. For example, we could take the proposition expressed by 'The oldest fox that ever lived was male'. Suppose that Fredrick is the oldest fox that ever lived in w. According to (NA), q is not singularly about Fredrick in w, since there are worlds in which other foxes are the oldest fox that ever lived. But suppose we rigidify the description to get a new proposition q^* . q^* can be expressed by 'The actual oldest fox that ever lived was male'. According to (NA), q^* is singularly about Fredrick in w. So q^* is a singular proposition. But anyone vaguely sympathetic to an aboutness without properties account of singular thought will reject this verdict. q^* is no less descriptive than q. Both propositions manifest paradigm instances of descriptive, satisfactional aboutness with respect to Fredrick. According to anyone vaguely sympathetic to an aboutness without properties account of singular thought, this means

that both q and q^* manifest a paradigm instance of non-singular aboutness.¹⁰⁹ They will claim that rigidifying a description cannot make a proposition singular.¹¹⁰

4.3

I said that the (DE) claim above points towards the idea that singular thoughts are object-dependent. The rough idea here is that a thought is object-dependent with respect to o when the thought's existence, or availability, depends on the existence of o.

There are really several slightly different conditions we could be getting at with this talk of object-dependency. A simple idea is that the dependency in question is just a matter of

¹⁰⁹ It might be objected that we should understand necessary aboutness in terms of truth. We might say that singular thoughts have *object-involving truth conditions* (for this terminology see Sainsbury 2020). On this view we'd say something like:

⁽OITC) A proposition p is singularly about o in w iff: (i) p is about o in w; and (ii) for every world w^* and for some property F: p is true in w^* iff o is F in w^* .

However, if we have a suitably broad view of what a property is, (OITC) will be trivial. For example, on a broad view of properties, $\lambda x(x)$ is such that p is true) is a property o could have. In that case (OITC) will entail any proposition that is about o (in a world) will be singularly about o (in that world). Also, I hope it's clear that this suggestion will face the same issue as (NA). (Glick rejects something similar to OITC for something similar to this second reason.) Consider the proposition expressed by the sentence 'The actual F is G' in world w. Suppose that o is the F in w. This proposition is about o and, in every world w*: this proposition is true in w* iff o is G in w*. As such, I don't think there's any advantage to (OITC) over (NA).

¹¹⁰ A defender of (NA) might object that we can avoid this conclusion by appealing to the distinction between de jure and de facto rigid expressions. They could claim that (NA) should be understood only in terms of de jure rigidity. This distinction is introduced in the forward of the 1980 edition of Naming and Necessity (p.21; footnote 21). Kripke claims that a de jure rigid expression is one where "the reference of a designator is stipulated to be a single object". A de facto rigid expression is one where "a description [...] happens to use a predicate [...] that in each possible world is true of one and the same object" (1980, p.21). 'The smallest prime' and 'The square of two' are clear examples of de facto rigid expressions. Names are de jure rigid, according to Kripke. Are rigidified descriptions such as 'The actual *F'* de jure or de facto rigid? It's unclear. It depends on how we spell out the distinction in more detail than is given in Kripke's footnote. It is common to say that de jure rigidity is rigidity due to a semantic rule: "a de jure rigid designator [...] has constant reference in virtue of the semantical rules of the language, so that it does not merely turn out that the term is rigid" (McGinn 1982, p.99). On the other hand: "a de facto rigid designator has constant reference with respect to all possible worlds in virtue of expressing a condition which attributes a certain individual essence to an object, so that its rigidity traces to extra-linguistic modal facts" (McGinn 1982, p.99; for a similar account of the distinction, see Stanley 1997). If the distinction is understood in these terms, then 'The actual F' probably is de jure rigid after all. It is a semantic fact or rule that, roughly speaking, 'actual' combines with a definite determiner and a predicate to pick out the unique satisfier of the predicate, in the world of utterance, and then denotes that object in all worlds of evaluation. For further discussion of these issues, see Almog 1986, Stanley 1997, Textor 1998. Textor (1998) argues that the only option that avoids this conclusion—actualised descriptions are de jure rigid—is to understand de jure rigidity in terms of something like (C) above. So a name is de jure rigid iff it contributes an object as an immediate constituent of a Russellian proposition. I've already given some reason to reject (C). More generally, the de jure/de facto distinction is primarily a distinction at the level of language. It's not totally clear to me how we could apply this to the level of thought and of propositions. This is partly why I officially write of necessary aboutness and not *rigid* aboutness.

¹¹¹ This idea is most strongly associated with Evans (1982, e.g. p.71) and McDowell (1984, 1986).

necessarily co-varying existence. One way to formulate this, drawing on Glick (2018, p.1053), is to say:

(Strong OD) A proposition p is singularly about o in w iff (i) p is about o in w; and (ii) for every world w^* : p exists in w^* only if o exists in w^* .

One initial issue with (Strong OD) is that we could have theoretical reasons to hold that all propositions exist in every possible world. If that were the case, then (Strong OD) would entail that *any* proposition that is about *o* in *w* is singularly about *o* in *w*. However, we could come up with a weaker version of object-dependence that accommodates the idea that propositions could exist in every world. We could say:

(Weak OD) A proposition p is singularly about o in w iff (i) p is about o in w; and (ii) for every world w^* : p is entertainable in w^* only if o exists in w^* .

The idea here is that, although all propositions exist in every world, not all propositions are accessible as objects of thought in every world. In particular, a proposition that is object-dependent with respect to o cannot be entertained in any world in which o does not exist. In what follows, I'll mostly focus on (Weak OD).

Glick has a nice argument that no one should accept (Strong OD), because object-dependency is not sufficient for singular thought. ¹¹³ The broad idea is that object-dependency is a transitive relation. This will produce obviously wrong verdicts about singularity. Glick's argument works equally well against (Weak OD). I will present a generalised version of the argument, and will present it as an argument against (Weak OD). ¹¹⁴ To get the argument going, we need to assume there is at least one pair of objects o and o* such that both:

- 1. Necessarily: o exists only if o* exists
- 2. There is some world w and some proposition p such that: p is singularly about o in w but p is non-singularly about o^* in w.

-

¹¹² For more discussion of this, see Martin 2002, pp.176-178ff. and especially footnote 8. Evans and McDowell write both in terms of the *existence* of propositions depending on the existence of objects (e.g. Evans 1982, p.71) and of the *availability* of propositions depending on the existence of objects (e.g. McDowell 1982, p.204).

¹¹³ See \$5.2 of Glick 2018.

¹¹⁴ Glick himself uses a mathematical example to illustrate the point. As I will explain in chapter 5, \$6, I don't want to commit to the idea that there is singular thought about numbers.

Assume origins essentialism for the sake of the example, at least to the extent that a person cannot have different parents. Let Joanna be the only daughter of Imogen. Necessarily: Joanna exists only if Imogen exists. Suppose Imogen is the tallest logician in London, in some world w. Let q be the proposition expressed by 'The tallest logician in London is shorter than Joanna' in w. Suppose q is singularly about Joanna in w. By (Weak OD), for any world w, q is entertainable in w only if Joanna exists in w. And for any w, Joanna exists in w only if Imogen exists in w. By transitivity, for any world w, q is entertainable in w only if Joanna exists in w. It's really plausible that q is about Imogen in w. So by (Weak OD), q is singularly about Imogen in w.

This is a bad result. It is very plausible that q is only non-singularly about Imogen in w. A friend of (AV4) would certainly claim this. But even if, for some reason, we weren't convinced by this, there's still a problem for object-dependency. Anyone who holds that object-dependency is sufficient for singular thought will be committed to the idea that there is no pair of objects in the universe that satisfy both (1) and (2) above. If there were such a pair, we'd be able to come up with a counterexample that is parallel to the case I just gave. This is a really bad commitment. So (Weak-OD) is false. No one should think object-dependency (weak or strong) is sufficient for singular aboutness.

4.4

I've just argued that no one who is broadly sympathetic to the aboutness without properties account of singular thought should hold that either necessary aboutness or object-dependency are individually sufficient for singular thought. (I've argued no one *at all* should hold this for object-dependency.) Can such a person say they are *jointly* sufficient? That is, should someone who is broadly sympathetic to (AV4) accept the following?

(OD+NA) A proposition p is singularly about o in w if for every world w^* : (i) if p exists in w^* , then p is about o in w^* and (ii) p is accessible as an object of thought in w^* only if o exists in w^* .

No. We could rigidify the description in the Joanna case above. Again, let Joanna be the only daughter of Imogen. Necessarily: Joanna exists only if Imogen exists. Suppose Imogen is the tallest logician in London, in some world w. Let q^* be the proposition expressed by 'The actual tallest logician in London is shorter than Joanna' in w. Suppose q^* is singularly

about Joanna in w. (OD+NA) entails that q is entertainable in a world only if Joanna exists in that world. And we're supposing Joanna exists in a world only if Imogen exists in that world. So q^* is entertainable in a world only if Imogen exists in that world. And q^* is about Imogen in every world. So (OD+NA) entails q^* is singularly about Imogen in w. But for the same reasons I gave in §4.2, anyone who is sympathetic to the aboutness without properties account of singular thought should deny this: they will claim that rigidifying a description cannot make a proposition singular.

5. An account of singular thought

5.1

Let's think back to (G2) from §2. It says:

(G2) A proposition *p* is singularly about *o* in *w* iff (i) *p* is about *o* in *w*; and (ii) it's not the case that *p* is about *o* in *w* merely by concerning one or more of *o*'s properties in *w*.

I've argued that anyone who is broadly sympathetic to the aboutness without properties account of singular thought should not accept that the saliant alternatives to (G2)—constituency, necessary aboutness, object-dependency—are sufficient for singular aboutness, either individually or jointly. This lends support to the idea that the righthand side of (G2) gives at least a necessary condition for singular aboutness.

I think we should take seriously the desire, which I mentioned in §2, to give at least some sort of positive account of singular aboutness. For this reason we shouldn't accept (G2) as it stands. I think we should add necessary aboutness as a necessary condition on singular aboutness. This would transform (G2) into:

(SA) A proposition p is singularly about o in w iff (i) for any world w^* : if p exists in w^* , then p is about o in w^* ; and (ii) it's not the case that p is about o in w merely by concerning one or more of o's properties in w.

Suppose we encountered a proposition that satisfies (G2) without satisfying (SA). So the proposition satisfies (ii), which (G2) and (SA) have in common, but the proposition does not satisfy (i) in (SA). This proposition is not about o in every world. For example, it might be about object o^* , instead of o, in some worlds. Now it's a little hard to imagine

such a proposition. This is because it's natural to think that what allows a proposition to be about different objects in different worlds is that the proposition is merely 'descriptively about' those objects (i.e. for each world w, the proposition is about an object a in world w because a satisfies some description, in w, which the proposition concerns). And to say this is just to say that it's natural to think that what allows a proposition to be about different objects in different worlds is that the proposition fails to satisfy (ii) above with respect to those objects. Thus it's somewhat hard to imagine a proposition that satisfies (G2) without satisfying (SA). That said, I have no reason to think that this is strictly impossible. It would be especially hard to establish this without taking on more commitments about the nature of propositions and about how aboutness is manifested by propositions. So let's suppose it is possible to encounter a proposition that satisfies (G2) without satisfying (SA). There is at least some reason to claim that such a proposition would not be singular. How can a proposition be *singularly* about object o if it is not about o in every world? After all, it might be about some object o^* , instead of o, in some worlds. This seems to be incompatible with singular aboutness with respect to o, as we naturally understand it. For this reason, (SA) is preferable to (G2). I take it that these claims are not particularly controversial. As far as I know, everyone recently interested in singularity and singular thinking holds that necessary or rigid aboutness is necessary for singular aboutness.

The only remaining question is whether some version of object-dependency should be added as a necessary condition for singular aboutness. We should not add strong object-dependency as a necessary condition. Strong object-dependency entails some substantive claims about the metaphysics of propositions. There is no need for anyone to take a stand on these issues in their definition of singular thought. What about weak object-dependency? Should we prefer the following to (SA)?

(SA+OD) A proposition p is singularly about o in w iff (i) for any world w^* : if p exists in w^* , p is about o in w^* ; and (ii) it's not the case that p is about o in w merely by concerning one or more of o's properties in w. and (iii) for every world w^* : p is entertainable in w^* only if o exists in w^* .

I will argue we should not prefer (SA+OD) to (SA) in this context. Taking (SA+OD) as our definition or account of singular thought will come dangerously close to begging the question in favour of AV.

To see this note that AV already entails that any singular thought satisfies (iii) in (SA+OD). As we saw in chapter 3 ($\S6.2$), any acquaintance view will say that a subject can entertain a proposition that is singularly about object o in w only if the subject is acquainted with o in w. If o does not exist in some world w^* , then surely it's not possible to be acquainted with o in w^* . So any acquaintance view will say no subject can entertain a proposition that is singularly about o in w^* . So at a minimum, on any acquaintance view:

(*) If a proposition *p* is singularly about *o* in *w* then (*p* is accessible as an object of thought in *w* only if *o* exists in *w*)

I argued above that we should hold necessary aboutness is necessary for singular aboutness. Given this, I suggest AV should also commit to the following slightly stronger claim:¹¹⁵

(%) If a proposition p is singularly about o in w, then for every world w^* : if p exists in w^* , p is singularly about o in w^* .

Together (*) and (%) entail that (iii) in (SA+OD) is necessary for singular aboutness. So, according to AV, there could be no propositions that satisfy (SA) in a world without satisfying (SA+OD) in that world.

If we chose to *define* singular thought in terms of (SA+OD)—rather than (SA)—that'd be good for AV, since AV already entails that all singular thoughts are weakly object-dependent. AV's rivals may well not predict this. I want to avoid any suggestion or sense that my account of singular thought is gerrymandered to suit or match AV. Whether or not weak object-dependency is necessary for singular aboutness is a contentious issue. And I don't have any independent reasons to prefer either (SA) or (SA+OD). So I'm going to conclude that we should accept (SA) as the best account of singular aboutness. More precisely, someone who is broadly sympathetic to (AV4) and an aboutness without properties account of singular thought—but who is open-minded about how to precisify this—should understand (AV4) in terms of (SA). In short, they should say singular aboutness is rigid non-descriptive aboutness.

-

¹¹⁵ We should only reject the move to (%) if we think the following triad is possible for some proposition p: (I) p is singularly about o in w; (II) p is about o in every world; (III) p is not singularly about o in some world w'. To simplify discussion in the next few pages, I'll suppose this is not a possibility on any sensible view of propositions.

¹¹⁶ For example, Crane 2011 denies this.

The final thing to do is to use this account of singular aboutness—(SA)—to give an account of singular propositions and of singular thought. These notions aren't relativised to a world. Here's (SA) again:

> (SA) A proposition p is singularly about o in w iff (i) for any world w^* : if p exists in w^* , then p is about o in w^* ; and (ii) it's not the case that p is about o in w merely by concerning one or more of *o*'s properties in *w*.

As I said in \$1, I will say that:

- A thought is singular iff it has a singular proposition as its content.
- A proposition p is singular iff there is some object o such that: p is singularly about o in every world in which p exists. 117

Singular aboutness in the last bullet point is defined in (SA). What about non-singular aboutness? We can say, very simply, that:

- A proposition p is non-singularly about an object o in w iff p is about o in w but p is not singularly about o in w.
- A proposition p is non-singular iff p is not singular
- A thought is non-singular iff it has a non-singular proposition as its content.

Note that (%) above rules out the idea that there are non-singular propositions that are singularly about an object in some worlds and not in others.

6. Conclusions

In this chapter I have given an account of singular thought that makes (AV4) more determinate and precise. I've said that the aboutness without properties account of singular thought in (AV4) combines a positive and a negative claim concerning singular aboutness. (i) in (SA) makes the positive claim more precise; (ii) in (SA) makes the negative claim more precise. Both (i) and (ii) are necessary (and jointly sufficient) for singular aboutness. AV should understand (AV4) in this way.

¹¹⁷ Given (%) this is equivalent to saying: a proposition p is singular iff there is some object o such that: p is singularly about *o* in at least one world in which *p* exists.

Where are we? In chapter 3 I defended and explained AVs account of acquaintance. In Chapter 1 I defended the general type of account that AV gives of singular thought. In this chapter I put forward and defended a more precise and complete account of singular thought. My next task is to defend the idea that acquaintance (so understood) is required for singular thought (so understood).

Chapter 5: In defence of AV

1. Introduction

In chapter 1 (§5) I said that AV is committed to at least four claims:

(AV1) A subject can entertain a thought that is singularly about o only if that subject is acquainted with o.

(AV2) Some objects of acquaintance are ordinary objects.

(AV3) A subject is acquainted with an object *o* iff that subject bears at least one of the following three relations to *o*: (i) perceptual acquaintance; (ii) memory acquaintance; (iii) communication-based acquaintance.

(AV4) A thought is singularly about *o* iff that thought satisfies aboutness without properties with respect to *o*.

So far in this thesis, my focus has been on explaining and defending (AV2), (AV3) and (AV4). In this chapter my focus will be more directly on (AV1). I will defend and motivate (AV1) by discussing and responding to two types of objection. First, I will discuss an undermotivation objection. Second, I will discuss some apparent counterexamples.

Most of the basic materials to formulate and respond to these objections—especially the first objection—can be found in previous chapters. In part, this is because the defensibility of (AV1) depends on (AV2), (AV3) and (AV4). AV is plausible because of the particular and specific account of acquaintance and singular thought that it adopts. In this chapter I will put these materials together, in order to summarise and conclude the first half of this thesis.

2. Undermotivation

2.1

Undermotivation objections to acquaintance views claim that there is no reason to hold an acquaintance view. The claim is that acquaintance views place unwarranted, illiberal constraints on singular thinking and that there is no reason to think these constraints are genuine ones. As Hawthorne and Manley put it:

Our first goal in this book is to argue that there is no good reason to impose acquaintance constraints of any sort on reference or singular thought [...] Acquaintance, in our view, is a dispensable relic of a bygone era in the philosophy of language and mind. (2012, p.25)

We can classify undermotivation objections into two different kinds. The first kind will focus on how acquaintance views define or understand 'acquaintance' and 'singular thought'. The claim is that, on any remotely plausible acquaintance view, 'acquaintance' and 'singular thought' must be understood in a gerrymandered way, such that these things don't pick out genuine or interesting semantic, epistemic or psychological kinds. ¹¹⁸ It is clear that this would make acquaintance views undermotivated.

The second kind will focus more directly on an acquaintance view's claim that acquaintance is required for singular thought. This version of the objection concedes that acquaintance views can define 'acquaintance' and 'singular thought' in a way that picks out genuine or interesting kinds. But it claims that the thesis that acquaintance is required for singular thought is mere prejudice: there are no good theoretical reasons to believe in this constraint.

In chapters 1, 3 and 4 I have been very careful to give an account of acquaintance and of singular thought that ensures that these things are genuine and interesting kinds. I have ensured that these things form unified kinds, worthy of the labels 'acquaintance' and 'singular thought'. For this reason, I will focus on the second kind of undermotivation objection here. I will focus on undermotivation objections that are directed most immediately at (AV1), given AV's particular understanding of acquaintance and singular thought.

I gave some basic, initial motivation for AV in chapter 1, §3.2. I said there must be *some* sort of constraint on singular thought, and acquaintance appears to be a plausible constraint. However, we'll need to add to this to assuage Hawthorne and Manley's worry here. To respond to this kind of undermotivation objection, I will set out the picture of the acquaintance view—AV—that I have given so far in this thesis. I will present it as a theoretically motivated position. It's not that AV rest on nothing, or on sand, or on an ill-directed desire to pointlessly preserve certain aspects of Russell's views on thought and reference. Rather AV rests on a claim about the explanatory role of perception, with

_

¹¹⁸ See, for example, Hawthorne and Manley 2012, p.26.

respect to our thoughts about objects in the world. AV claims that perception is the fundamental way in which our thoughts make contact with the world.

2.2

Let me summarise the picture of AV that I have given so far in this thesis. We can start with the idea that, if we are to think about an object in the world, in any sense, we must have some means of identifying that object, picking out or fixing upon it. Something must determine that we are thinking about that very object, rather than about any other object in the universe. There are two broad ways we can do this. We can identify an object by describing it: by coming up with a description that the object uniquely satisfies. Or we can identify an object in some other, more direct way, for example by bearing some relation to the object and exploiting this relation.

According to the account of singular thought I have recommended in this thesis, the distinction between singular and non-singular thought matches up with the distinction between these two modes of identification. Singular thoughts exploit a non-descriptive mode of identification. Non-singular thoughts about objects exploit a descriptive mode of identification. (Recall, a singular thought exhibits aboutness without properties. In more detail, given chapter 4, this means that a singular thought has a singular proposition as its content. A singular proposition is singularly about at least one object. A proposition is singularly about an object iff it is necessarily about that object, not merely in virtue of concerning one or more of that object's properties.)

AV, like any acquaintance view, claims that acquaintance is required for singular thought. Given the above, AV also claims that all non-descriptive modes of identification of an object, for the purposes of thought about it, are acquaintance relations. In chapter 3 (§3) I argued that an acquaintance relation is either perception, memory or standing in a communication chain that bottoms-out in perception. So AV claims that relational modes of identification of an object, for the purposes of thought about it, are limited to perception of that object, perceptual memory of that object or standing in a communication chain that bottoms-out in perception of that object.

Here we really get to the heart of AV, as I have presented it. AV rests on a bold claim about the explanatory role of perception with respect to our thoughts about objects in the world. The claim is that whenever we are able to identify or fix upon an object, for the

purposes of thought, in a non-descriptive or non-satisfactional way, we identify that object via a relation that we can trace back to perception of that object. According to (AV3) this relation is either itself perception of the object or, more derivatively, perceptual memory of the object or standing in a communication chain that ultimately bottoms-out in perception of the object. In chapter 3 (§3) I argued that there is sufficient unity to these relations, which trace back to perception of the object in question. They should be grouped together as acquaintance relations. I also argued that other, somewhat similar relations—for example, perceiving a causal trace of an object—should not be grouped together with the acquaintance relations above. These other relations don't trace back to perception of an object, in the relevant sense.

Given this, AV claims that perception explains how it is that our singular thoughts make contact with objects in the world. In the most basic case, we identify and fix upon objects by perceiving them. Our memory capacities and linguistic capacities expand the range of objects we can relationally identify beyond our immediate environment. However, these extra extended modes of identification ultimately trace back to and bottom out at perception. According to the account of communication-based acquaintance given in chapter 3 (§3), when we become acquainted with an object by learning a name of that object, the causal chain associated with the name must terminate in perception of the object. So, ultimately, it is perception that explains and makes possible all our capacities for singular thought. In addition, AV claims, if we cannot identify or fix-upon an object by a mode of identification that bottoms-out in perception, then we can only identify or fix-upon the object in a descriptive or satisfactional way. Relational, non-descriptive identification is only possible when perception is involved (perhaps remotely involved).

These remarks don't show that AV is true. However, these remarks do suggest it is unfair to claim that AV is undermotivated because it rests on no solid foundation. It is unfair to claim that acquaintance constraints are mere prejudice. Rather, AV, as I have presented it, rest on a particular view about the explanatory role of sensory perception, with regards to our capacities to think about objects in the world. We can describe this view as a kind of empiricism. This empiricism is empiricism about the *content* of thought, rather than about the justification of thought or about knowledge. It's also an empiricism about our capacities to think about *objects* in the world, as opposed to our capacities to attribute properties or relations in thought.

We can characterise this empiricism in a little more detail by considering some extremely broad, foundational philosophical questions: How are our thoughts able to be about the world? How is it that our thoughts are of the right shape to fit the world? Empiricists claim that the ultimate answer to this question is *sensory experience* or *perception*. Ultimately, our thoughts and ideas get to be about the world, and they are answerable to the world, due to our sensory experience of the world. At a certain level of abstraction, this characterises at least one aspect of the empiricism of, for example, Hume and Locke.

AV is a view in a similar vein. For a thought that exhibits the most basic and direct kind of aboutness with respect to an object—singular aboutness—AV holds that the thought is singularly about the object because of an acquaintance relation, which is a relation that traces back to or bottoms out at perception of the object.

To say that AV is a kind of empiricism is not to show that AV is true. Empiricism doesn't give the only plausible answer to the foundational philosophical questions I raised above. But AV does provide a neat and natural picture of the role of sensory perception in our cognitive lives. It is inspired by and is in the same spirit as a serious philosophical view, with some historical pedigree. Exploring whether this broader sort of empiricist view is ultimately defensible is beyond the scope of this thesis. ¹¹⁹ Instead, my aim in this section has been to argue that AV can respond to undermotivation objections. AV can be presented as a theoretically motivated view that rests on a particular view about the explanatory role of sensory perception and about how our thoughts make contact with the world. AV does not rest on sand or on mere prejudice.

3. Alleged counterexamples

The most common objection to acquaintance views is that they face counterexamples.¹²⁰ These counterexamples are designed to make it seem as if a subject is entertaining or can entertain a singular thought about an object with which they are not acquainted. A key part of defending an acquaintance view is to respond to these cases.

¹¹⁹ See Campbell 2002, especially chapter 7, for a recent argument in favour of a version of something like this view.

¹²⁰ See, for example, Jeshion 2010, Hawthorne and Manley 2012, especially \$1.6; King 2020; Goodman 2014, 2018. For a helpful overview of these apparent counterexamples, see Pepp 2019.

In order to respond to counterexample cases, AV will need to argue that either (i) the thought involved in the case is not singularly about the object in question; or (ii) the subject bears some acquaintance relation to the object in question after all. In the cases I will consider, I will give response (i). This is because the cases are put forward by authors who assume a similar account of acquaintance to (AV3).¹²¹ The cases are designed such that, clearly, a subject is not acquainted with the object in this sense.

AV needs to be careful about giving response (i). As I have said repeatedly in chapter 1, an acquaintance view cannot just rely on intuitions about whether a given thought is singular. And it won't do if the only reason to deny the thought in question is singular is that this is convenient for AV to avoid apparent counterexamples. As such, AV needs to give theoretically motivated reasons to treat the thoughts as non-singular and it needs to justify this claim.

Next I will consider some particular counterexample cases. I'll start with what I think is the most difficult case for AV to deal with.

4. Descriptive names

4.1

I will say that a descriptive name is a name that has its reference fixed by a definite description. There is an immediate and important terminological issue here. Descriptive names are sometimes defined differently: as names that combine the epistemic features of definite descriptions (so we need to understand the associated description in order to understand and use the name) with the semantic features of ordinary names (so the name rigidly designates and refers to its bearer). If we define descriptive names like this, in the second way, they will pose little problem for AV. Given the account of singular thought in (AV4), it is very plausible that all thoughts expressed by descriptive names, in this sense, are non-singular, descriptive thoughts. However, if we define descriptive names like this, it won't be obvious that descriptive names exist or form a genuine kind of name. There

¹²¹ It may be more accurate to say: these cases are put forward by authors who think acquaintance *would be* like this, if it existed as a unified, interesting explanatory kind.

¹²² See Davies and Humberstone 1980 for this kind of framing of descriptive names. This seems to be roughly how Evans (1982) understands them. For discussion of these two ways of understanding descriptive names, see Sainsbury 2020, p.30ff. Sainsbury claims descriptive names in the second sense do not exist in natural language.

will be an important category of names, that are somewhat related to descriptions, that this definition misses out. As such, I will instead define descriptive names merely as names that have their reference fixed by description. This leaves open whether descriptive names are of the same kind as ordinary, paradigmatic names. (I will ultimately argue they are not, in an important sense.)

Consider a case in which the reference of the name 'Julius' is fixed by the description 'the unique inventor of the zip'. (We already briefly considered this example in chapter 1, §4.3.) Suppose that Julius is lost to history. No one remembers them. There is no name for them in circulation in any linguistic community that is causally connected to perception of Julius. So there is no acquaintance with Julius. There are different apparent counterexample cases to AV that make use of descriptive names like this. These cases will claim that certain thoughts expressed by descriptive names are singular in the absence of acquaintance with the referent of the name. Some of these cases are relatively easy for AV to deal with. Some are more challenging. In the remainder of this subsection, I will explain why there is an initial problem with descriptive names for AV. I will identify what makes these cases particularly difficult for AV. I will recommend AV adopt a 'description-externalist' account of descriptive names to respond to the cases. I recognise this account has some apparently strange consequences. I try to alleviate these worries in §4.2 and §4.3.

Let's start with an easy case. Suppose that *S* decides to stipulate that the reference of 'Julius' is fixed by the description 'the unique inventor of the zip'. On the rare occasions *S* utters sentences containing the word 'Julius' in public, she explains to her audience how the reference of the name is fixed. The name 'Julius' doesn't spread around *S*'s linguistic community. This kind of case would be a problem for AV if some of these Julius-thoughts (thoughts expressed using the name 'Julius') are singular.

But I think it is quite easy for AV to deny this, given the account of singular thought from chapters 1 and 4. It seems clear that these thoughts don't satisfy aboutness without properties. These thoughts identify Julius in a descriptive way. It's plausible that the propositions expressed by these thoughts are about Julius because they concern some properties (being the unique inventor of the zip) that Julius satisfies. After all, everyone who uses and understands the name, and who expresses thoughts using the name, knows that the name has its reference fixed by description and knows which description is used to play this role. It is plausible to say that these people pick out Julius *via* these descriptions

in their Julius thoughts. If we think back to AV's account of singular thought from chapter 4, this is sufficient to make their thoughts non-singular.

What made this case easy to deal with is that the name 'Julius' and the description associated with it remain attached to each other, as the case is described. Everyone who picks up the name, and gains the capacity to use it, knows that the name has its reference fixed by a description and knows which description does this. This makes it plausible that these Julius thoughts are descriptive, non-singular thoughts. But perhaps there are similar cases without this feature.

Things are more challenging if the name Julius spreads around *S*'s linguistic community and becomes a name with widespread public use. What causes AV difficulty here is the possibility that the name 'Julius' becomes detached from the description that fixes its reference in the sense that, people might be able to gain the capacity to use the name without knowing **that** it has its reference fixed by description, and/or without knowing **which** description fixes the reference.

Suppose *S* fixes the reference of 'Julius' as above. *S* starts talking to her friends about Julius, using the name 'Julius', but she doesn't inform some of her friends how the reference of the name has been fixed. Suppose that, in general, we allow that a name that has its reference fixed by description can spread around a linguistic community, much like a name that has its reference fixed via some baptism involving perception. Suppose that the name 'Julius' spreads around *S*'s linguistic community in this way. It is less straightforward for AV to claim that all these Julius thoughts are non-singular. For example, suppose that *T* is several links away from *S* in the 'Julius' causal chain. *T* has no idea how the reference of 'Julius' has been fixed. *T* just picked up the name from someone and never asked who Julius was. It's not obvious, in this case, that *T* identifies Julius in her thoughts *as* the unique inventor of the zip. It's not obvious that *T*'s Julius thoughts must express propositions that are about Julius because the propositions concern properties that Julius uniquely satisfies. *T* might have no idea which properties Julius uniquely satisfies. For example, as I've described the case, it's not even clear that *T* needs to have the concept of a zip.

¹²³ Here I'm supposing something like Kripke's causal-chain theory of names. See discussion of this in chapter 3 (§3) above. Kripke himself certainly seems to think names can have their reference fixed by either a descriptive baptism or by an ostensive/perceptual baptism (1980, pp.94-97)

The point is this: by hypothesis, no one is acquainted with Julius. But if 'Julius' can spread around a linguistic community, in the same way as an ordinary name that has its reference fixed via perception, then it is not straightforwardly obvious that all members of the linguistic community identify Julius in a descriptive way. When they think about Julius, it is not straightforwardly obvious, in every case, that they entertain a proposition that is about Julius because the proposition concerns properties that Julius uniquely satisfies (e.g. being the unique inventor of the zip). That is to say, it is not straightforwardly obvious that all their thoughts are non-singularly about Julius. As such, some of these thoughts may appear to be singularly about Julius. If so, we have an instance of singular thought in the absence of acquaintance.

To respond to this apparent counterexample, AV needs to deny that these Julius thoughts are singular. One bad option, not worth pursuing, would be to claim that T's Julius thoughts aren't even *about* Julius. This would involve the claim that a subject who hears a descriptive name gains the capacity to use that name (and express propositions with it) only if they know that it is a descriptive name and know which description fixes its reference. It is this were so, the subject T, described above, wouldn't really have the capacity to use the name 'Julius' to refer to Julius. When she uses the name, T wouldn't express any proposition about Julius. The problem with this suggestion is that it conflicts with the apparently obvious linguistic data concerning these kinds of cases. I also think this would involve giving up on important aspects of the broadly Kripkean causal theory of name transmission that I relied on when defending AV in chapter 3 (§3).

Instead, AV should claim that all thoughts expressed using descriptive names are non-singularly about the object in question. (In other words, the propositions that are the contents of these thoughts are about the object in question because they concern properties that the object uniquely satisfies.) This includes thoughts entertained by subjects (like T above) who have no idea which description fixes the reference of the name in question, and possibly have no idea that any description does so. This immediately raises the question: Which description could a proposition, expressed by a subject like T, use to identify and fix upon the referent of a descriptive name like 'Julius'? Recall T herself doesn't know that a description fixes the reference of the name, or which description does this. I

¹²⁴ This seems to be roughly Evans' view of descriptive names, see Evans 1982, p.50. For recent critical discussion of Evans, see Reimer 2020.

think there are two options here. First, there is what we might call the 'metalinguistic' option. Second, there is what we might call the 'description-externalist' option.

On the metalinguistic option, the proposition expressed by a subject like T fixes upon and identifies Julius as 'the referent of the name 'Julius' or 'the person that speaker was talking about when they used the name 'Julius'. The idea would be that the proposition that T expresses, when she uses the name 'Julius', concerns one of these complex properties (e.g. $\lambda x(x)$ is the referent of the name 'Julius')), and T's thought is about Julius because Julius uniquely satisfies this description. I'm not going to pursue this option any further here. This option gives AV the verdicts it wants, regarding descriptive name cases, but it is ad hoc. There is no other reason to hold the metalinguistic view of descriptive names.

On the description-externalist option, the proposition expressed by a subject like T fixes upon and identifies Julius with the canonical description that fixes the reference of 'Julius' ('the unique inventor of the zip'). 125 The proposition T expresses, when she uses the name 'Julius', concerns this complex property. And T's thought is about Julius because Julius uniquely satisfies this description. (This is sufficient to make T's thought non-singular, given the account of singular thought from chapter 4.) So T is related to the same proposition that would be entertained by someone who knows the reference of 'Julius' is fixed by this description and who thinks about Julius in an explicitly descriptive way. This option is externalist insofar as it holds that *T* can be related to this proposition even when *T* has no idea that 'the unique inventor of the zip' is the description that fixes the reference of Julius. I said it's not clear that T needs the capacity to employ the concept of a zip in order to gain the capacity to use the name 'Julius'. So this description-externalist option involves commitment to the idea that a subject (like T) can entertain a proposition that concerns the property of being a zip without having the concept of a zip. So, for example, they can entertain a proposition that concerns the property of being a zip without being able to recognise paradigm instances of zips or without being able to answer the question: 'What's a zip?'.

We can bring out the sense in and extent to which this position is externalist by contrasting two cases. I'll present them as two worlds:

_

 $^{^{125}}$ It is plausible that T's Julius-thoughts can be rigidly about Julius. To account for this, we can simply say the description in question is 'the *actual* unique inventor of the zip'.

- In world w, things are as described above: No one is acquainted with Julius. S originally fixes the reference of 'Julius' by description. T is several links away from S in the 'Julius' causal chain. T has no idea how the reference of 'Julius' has been fixed. T just picks up the name from someone and never asks who Julius is. T judges 'Julius was tall'.
- World w^* is identical to w except for the following: S originally fixes the reference of 'Julius' via perceptual acquaintance with Julius. 'Julius' is just an ordinary, non-descriptive name. Just as in w, and in exactly the same circumstances, T picks up the name from someone who is several links away from S in the 'Julius' causal chain. ¹²⁶ T has no idea how the reference of the name is fixed. In the same circumstances as in w, T judges 'Julius was tall'.

From the inside, things will be exactly the same for T in w and w^* . There will be no introspectable difference between the two worlds. ¹²⁷ However, on the description-externalist option I'm exploring here, T expresses a different kind of proposition in w and w^* , when she makes use of the name 'Julius'. In w^* she expresses a singular proposition that is singularly about Julius. In w she expresses a proposition that is non-singularly about Julius. This proposition is about Julius because it concerns the property $\lambda x(x)$ is the unique inventor of the zip). In addition, the fact that T can express this proposition and be related to it doesn't depend on T having the concept of a zip.

This description-externalist response to descriptive names counterexamples is not incoherent or absurd. But we should concede it involves biting some potentially uncomfortable bullets. It has some apparently strange consequences. As such, this response can only be adopted by AV given two conditions:

(I) Descriptive names are pretty uncommon in our languages. Names have their reference fixed by description only in limited, unusual or special cases. In particular, it is uncommon for descriptive names to spread around a linguistic community after being detached from their reference-fixing description. (After

¹²⁶ Recall that, according to AV, T is thereby acquainted with AV in w^* (but not in w).

¹²⁷ This may remind readers of my discussion, in chapter 3, §7, of externalism regarding thought that purports to be about the non-existent. In general, AV is going to be committed to several sorts of externalism and several kinds of failures of the transparency of thought content. To explain the similarity between the two thoughts here, we should say they are realised or actualised by somewhat similar thought episodes or vehicles.

all, the description-externalist account of descriptive names makes them odd. Large swathes of a linguistic community might be mistaken about what proposition they express with descriptive names and what the content of these names are.)

(II) There is some reason to adopt this account of descriptive names other than the fact that it provides AV with a convenient way to avoid a counterexample (otherwise this response will be ad hoc and undermotivated).

I'll give some reason to think that (I) can be met in §4.2. In §4.3 I'll argue that (II) can be met.

4.2

Let's start with (I). We should recognise that I have argued AV should accept a pretty odd view of descriptive names. In general, it will not be possible for audiences to tell whether a given name has its reference fixed by description or via perceptual ostension. In general, audiences can only work this out by being told that a name is descriptive. And if audiences are not told this, they will generally not have access to the descriptions that fix the reference of descriptive names. In addition, on the account of descriptive names I've recommended for AV, if a subject doesn't know (at least implicitly) what description fixed the reference of a name, that subject is confused or mistaken about that name. In particular, the subject is mistaken (or at least ignorant) about what kind of proposition they express with the name. All this raises a danger that this account of descriptive names involves positing mass confusion about names in our linguistic communities. That would be a bad result.

AV can avoid this result if it turns out that descriptive names are uncommon, i.e. they are only used in special, strange and unusual circumstances. More precisely, AV can avoid this result if it turns out it is unusual for descriptive names to be used in a context where it is unclear how the reference of the name has been fixed and where the reference-fixing description becomes detached from the name (in the way described above). I think I can make a case that this is correct.

Most of the real-world examples of descriptive names in the philosophical literature involve cases where circumstances contrive to make perceptual or ostensive reference fixing impossible (perhaps temporarily). It seems plausible to say that, when perceptual or

ostensive reference fixing is possible, we use this method instead of the descriptive method. I'm claiming here that we prefer to fix reference via perception or ostension. We default to this kind of reference fixing when it's available. Given this, it is plausible to say that, if a descriptive name is coined at a time where perceptual contact is impossible, but at a later time perceptual contact with the object in question becomes possible, perceptual or ostensive reference-fixing may supersede or replace descriptive reference-fixing. Perhaps this happened in the 'Neptune' case I discussed in chapter 3, \$7. If so, the reference of our name 'Neptune' is fixed in just the same way 'Mars' or 'Venus' is fixed. This would be so even if Leverrier had *initially* fixed the reference of the name 'Neptune' as something like 'the unique perturber of Uranus's orbit'. After all, it only took a few days for an observatory to observe Neptune after Leverrier shared his discovery. This lends plausibility to the idea that descriptive names are fairly uncommon in our linguistic communities, because names are often only temporarily descriptive.

In general, when we iron out some of the idealisations of the causal theory of names which underpins my discussion, it might be attractive for us to allow that reference-fixing can be superseded or shift—in this sort of way—especially when a name first becomes attached to an object or when a name-using practice is first developing. This kind of flexibility can help deal with some tricky cases of the sort discussed by Evans 1973. For example, consider the following case:

Two babies are born, and their mothers bestow names upon them. A nurse inadvertently switches them and the error is never discovered. It will henceforth undeniably be the case that the man universally known as "Jack" is so called because a woman dubbed some other baby with the name. (Evans 1973, p.11)

Perhaps allowing that reference-fixing can be superseded in the way I've suggested can help deal with cases like this.¹²⁸ For example, suppose the reference of the name 'Jack' is initially fixed by description. If we understand the causal theory of names in an inflexible way, such that the initial baptism strictly fixes the reference of the name forever, 'Jack' will seem to refer to the wrong person. This problem will be solved if perceptual reference-fixing could supersede the initial reference fixing.

¹²⁸ For development of a view somewhat similar to this, see Devitt 1981.

Let's consider some other examples. It is sometimes claimed we can use descriptive names to name future objects, for example, unborn children. Kaplan's 'Newman 1' is a famous example (1968, 1989). This is stipulated to refer to the first child born in the twenty-second century. But this seems like a strange, unnatural, philosopher's example. It's really not clear there are (or would ever be) many names such as this in circulation in our linguistic communities. (I think we can say the same about 'Julius'.) A better example would just involve ordinary, expectant parents. 129 Expectant parents might decide to name their child 'Noah' before perceptual contact with the child is possible. I don't think this sort of mundane case obviously shows that descriptive names are common and widespread in a way that will cause trouble for AV. On one way to describe the situation, the parents intend to name their new child 'Noah'. Once perceptual contact with the child is possible which will likely happen before birth—Noah is actually named 'Noah'. 130 Even if the parents do come up with a descriptive name prior to perceptual contact, perhaps this descriptive name is superseded once perceptual contact is possible. After all, I've claimed we prefer and default to perceptual or ostensive reference-fixing and that we should allow that reference-fixing can be superseded when a name-using practice is first developing. If so, it seems unlikely that the descriptive name will spread far in a linguistic community in the intervening period, in the kind of ways that cause problems for AV.

Other realistic examples of descriptive names are what we might call *mysterious figures* examples. In these cases, a name is coined for a person that the general public do not know the identity of. Well-known examples here include 'Jack the Ripper', 'The Unabomber', 'The Zodiac Killer' and 'Tremulous Hand'.¹³¹ In these cases, the descriptions associated with the names are extremely well-known. It seems unlikely that someone would easily confuse these names with ordinary, paradigmatic names. I don't think it is especially implausible to claim that someone who uses these names without at least implicitly knowing the relevant descriptions is confused (or at least ignorant) about what proposition they express with the name.

_

¹²⁹ For discussion of a case like this, see Sainsbury 2020, p.29.

¹³⁰ Clearly this general picture of naming via baptism or dubbing involves some idealisation. I don't mean to suggest there is always a single, identifiable moment at which people or objects are named.

¹³¹ Gareth Evans gives 'Deep Throat' from the Watergate scandal as an example (1982, p.48). It's unclear to me this is a good example. My understanding is that Bob Woodward knew and had met Mark Felt (aka 'Deep Throat') prior to his becoming a secret source. The name is plausibly just a pseudonym that had its reference fixed via perception or perceptual memory, rather than by stipulated description.

Also in all four mysterious figures examples, the words that form the name partially describe the referent. Perhaps this is revealing. I think it would be odd if one of these widespread, real-world examples of mysterious figure descriptive names didn't partially describe its referent. We don't tend to call these mysterious figures simply 'James' or 'Claire'. It'd be a little odd if we did so. Presumably this is because it's helpful to remind hearers what description fixes the reference of the name. It would be hard to explain why this is helpful or necessary (and why it would be odd not to do this), if it were normal, widespread linguistic practice to fix the reference of a name via description and then let that name spread, just like an ordinary name, around a linguistic community. So perhaps this is actually not a widespread, normal linguistic practice.

There are a couple of other real-world examples where names might get their reference fixed by description, because perceptual or ostensive reference fixing is impossible. I'm mostly going to try to sidestep these, so I'll run through them quickly:

- (i) Plausibly, some names of abstract objects could get their reference fixed by description. It is not possible to perceive or point out abstract objects. I'm going to bracket-off these examples, for reasons I will explain in §5.2 below. Regardless of whether they are descriptive, it's unclear whether these names straightforwardly refer to any determinate object. So we won't find clear examples of widespread, realistic descriptive names here.
- (ii) In certain specialised fields of inquiry, we may want to name concrete objects that we cannot perceive or point to. I'm thinking here of objects that are too small or too far away to be observed.¹³³ These are the objects studied by some branches of particle physics or astronomy. Perhaps these names get their reference-fixed by description. I'm going to suggest that these names are not widespread in our linguistic communities. They are names used within highly specialised and theoretical disciplines. I don't think it is especially implausible to claim that someone who uses these names without at least implicitly knowing the relevant descriptions is confused about what proposition they express with the name.

¹³² Apparently 'Unabomber' was used as shorthand for 'University and Airline Bomber'. 'Tremulous Hand' is also known as 'The Tremulous Hand of Worcester'.

¹³³ For really interesting discussion that bears on whether, and in what sense, we see distant celestial bodies, see Sorensen 2007.

(iii) If one *deliberately* wants to name a non-existent object, then one might try to fix the reference of this name by description. It's hard to know how else one could try to fix the reference. Here, as in chapter 3, I want to bracket-off empty names (descriptive or otherwise) about fictional characters or objects. Settling questions about fictional discourse—e.g. whether fictional objects exist, whether makebelieve or pretense play some role here—would take us too far afield. I'm going to speculate that non-fictional, deliberately empty descriptive names are relatively uncommon in our linguistic communities. (If one coins an *accidentally empty* descriptive name then we don't have a new kind of descriptive name for my purposes in this section. This name will likely fall into one of the kinds I've already discussed—for example, a future 'existent' case, a mysterious figure case, a mathematical case (if we're nominalists), an astronomy case (think of 'Vulcan')—but the name will happen to be empty.)

All this is a little speculative. But I hope to have given some reason to think that descriptive names are a little less common than philosophers have been inclined to suppose. The cases that cause difficulty for AV are cases in which a descriptive name spreads around a linguistic community after being detached from its associated description. I hope to have given some reason to think that this will only happen in limited, special or unusual circumstances. This is because: when the reference of a name *is* fixed by description, I've suggested this will often be temporary. When the reference of a name is fixed by description in the long term, then it's likely that either (i) we have a mysterious figure case, in which case we often tend to use names that partially describe the referent; this helps keep the name and its associated description attached to each other, as the name spreads around a linguistic community; or (ii) the name is part of some specialised, theoretical discipline.

4.3

Now I'll turn to condition (II) above. I'm going to give some independent motivation for holding the description-externalist account of descriptive names.¹³⁴

-

¹³⁴ My reasons for not pursuing the metalinguistic option above is that these considerations don't motivate this option.

Suppose that T overhears someone say (falsely) that Julius didn't invent the zip. T forms the false belief that Julius didn't invent the zip. Suppose T is as above and has no idea that 'Julius' is a descriptive name and thus has no idea which description fixes the reference. Suppose that later T comes to learn that the name 'Julius' had its reference stipulatively fixed by the description 'the unique inventor of the zip'. I think it's somewhat natural to say that T will take herself to have made a special kind of mistake in this case. The mistake T will take herself to have made seems to be different in kind to the more ordinary mistake she might have made if she falsely believed Julius was French, rather than American. One way to explain or diagnose the mistake, from T's perspective, is to say she was mistaken about the content of the name 'Julius' and about what proposition she expressed with this name. On this diagnosis we say T originally took herself to be expressing a singular proposition about Julius, but after she finds out the reference-fixing history of the name, she realises she was actually expressing a descriptive proposition that identifies Julius as the unique inventor of the zip. That is why she made a special kind of mistake when she came to believe Julius was not the inventor of the zip.¹³⁵

I hedged by saying it is 'somewhat natural' to give my verdict about this case. I concede that it is hard to know what to say about cases like these. Given my remarks in §4.2, I can give a diagnosis of why this is hard. The 'Julius' example is probably what I called a 'mysterious figure' descriptive name, albeit it one about a rather prosaic mysterious figure. In §4.2 I suggested that we don't actually tend to give mysterious figures names like 'Julius'. The names we tend to give them partially describe the mysterious referent. (I speculated that this might be due to a desire to stop the name and the associated description from becoming detached from each other; i.e. to prevent a subject being in *T's* position.) If this is right, the 'Julius' case is an odd case. Hence, it's hard to know what to say about it.

Let's consider a parallel case involving a more real-world descriptive name. I think the verdicts and diagnoses I gave about the Julius cases above are a little clearer here. Consider the 'Noah' case from §4.2. The expectant parents fix the reference of this name via description. Suppose Noah exists (and has been conceived) but that perceptual contact with Noah is impossible for the time being. Suppose the parents start talking freely using the name 'Noah', without explaining who they are referring to. Suppose that *T* gets a bit

 $^{^{135}}$ T needn't believe a contradiction or a necessary falsehood in this case. Since 'Julius' is plausibly rigid, we might express the proposition T falsely believes with 'The actual unique inventor of the zip is not the inventor of the zip'.

confused while listening to the parents and forms the belief that Noah is not the expectant parents' unborn child. (As always, T doesn't know the name is descriptive.) Later T comes to learn that the name had its reference stipulatively fixed by the description 'The expectant parents' unborn child'. Again, I think it's natural here to say that T will take herself to have made a special kind of mistake. The mistake T will take herself to have made seems to be different in kind to the more ordinary mistake she might have made if she falsely believed that Noah was due in March, rather than April. Perhaps intuitions about this are muddled by origins essentialism, i.e. by the fact that, plausibly, Noah's parents are necessarily or essentially his parents. It might be objected that T's mistake is special only because she attributes to Noah a property that he necessarily or essentially fails to satisfy. But imagine T is also mistaken about the identity of the parents of another child, whose name isn't fixed by description. T falsely attributes a property to this second child that the child fails to have essentially or necessarily. Still, I think the mistake T will take herself to have made with her Noah belief seems to be different in kind to the mistake she made about the second child.

These remarks lend some plausibility to the idea that there is something importantly different about names fixed by description and names fixed by ostension or perception. It also lends some plausibility to the idea that someone who gains the capacity to use a descriptive name without knowing (at least implicitly) the relevant reference-fixing description is mistaken or confused about what proposition or content they express with the name. One explanation for this—admittedly not the only possible explanation—is that they take themselves to be expressing a singular proposition, but actually express a proposition that descriptively identifies the referent of the name. This lends some independent support to the description-externalist account of descriptive names that AV can use to avoid the counterexample cases I discussed above.

It might be objected that these remarks confuse what *fixes the reference* of a name with the *meaning* of a name. One key lesson from *Naming and Necessity* is that we should not run these things together. However, I don't mean to deny the logical space for a position that claims that the meaning or content of a descriptive name is very different to what fixes the reference of a descriptive name. I accept this divergence for names that have their reference fixed by perception or ostension. So I'm not failing to recognise that these things could radically come apart. Instead, I'm claiming that, specifically in the case of descriptive names, reflection on cases in which a subject *finds out* that a name has had its reference

fixed by stipulated description lends some plausibility to the idea that the reference-fixing for a descriptive name and the meaning or content of that name are closely tied together.

If we accept what I've claimed about at least some of the cases in this subsection, then there is some independent reason to adopt the description-externalist account of descriptive names. It is not completely ad hoc for AV to use this account to respond to the descriptive name counterexamples.

4.4

To summarise my recommended response to descriptive name cases: I've recommended a view on which all descriptive names (all names that have their reference fixed by stipulated description) can only be used to express non-singular, descriptive propositions. If descriptive name N refers to o by having its reference fixed by description d, then any subject who uses the name N expresses a proposition that is about o because the proposition concerns description d and o uniquely satisfies d. I argued there is at least some independent motivation for this position. Finally, I argued that this position is made more plausible by the fact that descriptive names (especially descriptive names that become detached from their reference-fixing descriptions and spread widely throughout a linguistic community) may be less widespread and common than philosophers often suppose.

This account of descriptive names will help AV to respond to some other apparent counterexamples. Many of these counterexamples can be assimilated into descriptive name cases. ¹³⁶ For example, consider the following case from Hawthorne and Manley:

[I]n 1512, Henry VIII ordered the construction of a great warship to be called *Henry Grace à Dieu*. Suppose he knows that his order will be carried out on time, but is given no reports of the progress of the ship on the principle that no news is considered to be good news. After the expected date of completion, he makes plans to visit the harbor. Surely he succeeds in referring to the ship if he says 'I plan to see *Henry Grace à Dieu*.' Moreover, we would not withhold an exported ascription: there is a warship such that King Henry believes he will see it. But his causal link to the ship leads in the wrong direction for him

¹³⁶ This may appear to undermine the claim, which I only just made, that descriptive names are reasonably unusual and mostly only occur in strange and unusual cases. But most of the counterexample cases are either rather strange and contrived cases or they involve descriptive names that are unlikely to spread around a linguistic community and thereby become detached from their associated descriptions.

to satisfy a standard causal acquaintance constraint. (Hawthorne and Manley 2012, p.28 (footnotes omitted))¹³⁷

It is plausible that the *Henry Grace à Dieu* is a descriptive name. It can only have its reference fixed by description, given that the ship doesn't exist when the name is coined. And the account of descriptive names in this section entails that Henry's thoughts about the ship are non-singular. If so, there is no problem for AV. Of course, as the case is described, the shipbuilders who work on the ship can have singular thoughts about the ship as soon as it exists (who knows exactly when that is). And Henry can have singular thoughts about the ship once he eventually sees it (or speaks to someone who has seen it). The response to the case above just claims that, for the period of time between when Henry coins the name and when Henry either sees the ship or talks to someone who has seen it, Henry's thoughts about the ship, including those expressed with the name 'Henry Grace à Dieu', are descriptive and non-singular.

Next, I'll run through a few other counterexample cases. These will be related to and similar to some of the discussion in this section. There is a connection between descriptive names and more general counterexamples to AV. I've said that we only coin descriptive names when we are forced to do so. And, in general, we are only forced to coin descriptive names of objects that are not objects of acquaintance. So many of the types of object that generate counterexamples to AV—because, it is claimed, we can think about them in a singular way in the absence of acquaintance—will be the kinds of object that we are most

_

¹³⁷ Hawthorne and Manley describe this as a 'reverse causal chain' case. But I find this (and the last sentence in the quotation) a bit odd. According to AV, whenever a subject entertains a singular thought about an object, that subject (and their capacity to entertain a singular thought about it) bears some causal relation to the object. As such, a promising source of counterexamples to acquaintance views are cases in which a subject's capacity to entertain a singular thought about an object causes an object to come into existence. This is incompatible with AV, because it precludes the right direction of causal connection between an object and the singular capacity. Such a case would definitely be a counterexample to AV. But in the Henry Grace à Dieu case Hawthorne and Manley say "Intuitions may waver a little as to whether Henry can refer to the ship before it is built. This is because many of us have presentist intuitions according to which, in the broadest natural sense of 'exists', only the present exists. [...] But presentism is no threat to liberalism. Meinongians aside, we can all agree that only existing things can serve as relata to the reference relation." (2012, p.28, footnote 88). But if we do not assume Henry can think singular thoughts about the ship before it is built, then Henry's capacity for singular thought about the ship doesn't cause the ship to be built. (Of course Henry causes the ship to be built, but not via his singular capacity with respect to the ship.) As such, the reason why Henry is not causally connected to the ship in the right way (as acquaintance with the ship would require) is not that some causal link runs in the wrong direction: the fact that Henry causes the ship to exist is perfectly compatible with the ship having various causal effects on Henry. The reason is just that the case stipulates that Henry isn't causally connected with the ship (he doesn't see the ship or have contact with anyone who is causally connected to the ship). As far as I can see, the case has little to do with direction of causation.

likely to name with descriptive names. For this reason, I will run through these other cases much more quickly. 138

5. Some other cases

5.1.

Non-existent objects. As we saw in chapter 3 (§§6-7), acquaintance with non-existent objects is impossible. So if there can be singular thought about non-existent objects, then there will be counterexamples to AV. As such, AV needs to hold that there is no singular thought about the non-existent.

I sketched an account of thought that purports to be singularly about the non-existent in chapter 3, \$7. This account made all such thought non-singular. I attempted to give this account some independent motivation. I won't repeat this here.

We can augment this with the account of descriptive names from §4 above. Some (not all) thoughts that purport to be singularly about the non-existent are plausibly expressed by descriptive names: names that have their reference fixed by empty descriptions. For these thoughts, AV can use the account from §4 above. These thoughts are non-singular because they have non-singular, descriptive propositions as their content. For example, the most common presentation of the 'Vulcan' case by philosophers plausibly makes this an empty descriptive name.¹³⁹ For thoughts that purport to be singularly about the non-existent, but which don't involve descriptive names—or any kind of description—AV can adopt the account from chapter 3, §7. The proposition entertained in these cases will be neither singular nor descriptive.

_

¹³⁸ There are some counterexample cases in the literature that I won't consider here. These are cases in which it seems fairly clear that the thinker identifies the object of their thought in a descriptive way. Examples of these include the bear-print cases from chapter 3 (§3.2), map cases (Pepp 2019, Hawthorne and Manley 2012, p.33) and various cases involving mysterious criminals (King 2020, p.76ff; Goodman 2018). It seems fairly clear to me that, given the aboutness without properties account of singular thought, these thoughts should not be treated as singular. I think the claim that these thoughts are singular is guided by the kind of belief report account of singularity (via HARMONY and SUFFICIENCY) that I considered and rejected in chapter 1, §4.2. Here I will focus on cases that are difficult for AV, given its aboutness without properties account of singular thought.

¹³⁹ For discussion of Vulcan. See chapter 3, §7.

Abstract objects. AV is committed to the claim that a subject is acquainted with an object only if that subject bears some causal relation to the object. This means we cannot be acquainted with abstract objects. So, according to AV, there can be no singular thought about abstract objects, for example, about numbers. If we hold there is singular thought about numbers, then there will be counterexamples to AV.

Giving an account of what numbers are, and of how we are able to think and talk about them (let alone *know* things about them), is deeply difficult. ¹⁴⁰ AV precludes one straightforward and simple account of this. On this account numbers are abstract objects that really exist in some third realm. Our thought and talk about numbers should be taken at face-value: each number word refers to a single, determinate abstract object, which really has the property of being odd, or prime, or whatever. Equally, each of our number thoughts is singularly about at least one such abstract object.

There are independent reasons to reject this straightforward and simple account of numbers and of number talk.¹⁴¹ I don't want to claim here that these reasons are decisive. But that AV precludes this simple account isn't really a problem for AV. Numbers will not give us immediate counterexamples to AV.

I think we can say something parallel about other purported abstract objects, like propositions or properties. AV precludes the most straightforward and simple realist treatment of our thought and talk about these things. But this is not an immediate counterexample to AV. There are independent reasons to reject this straightforward and simple realism.

5.3.

Future existents. We cannot be causally related to future objects. So according to AV, we cannot entertain singular thoughts about these objects. If we hold there is singular thought about future existents, then there will be counterexamples to AV.

¹⁴⁰ For a nice sense of the initial difficulty or puzzle here, see the very start of chapter 1 of Linnebo 2017 (p.4). ¹⁴¹ For one famous kind of reason see Benacerraf 1965. For a more explicitly semantic challenge for mathematical realism see McGee 1997. For further discussion see Button and Walsh 2018, chapter 2 and Hodes 1984, 1990.

If AV is combined with presentism, then these cases will be amalgamated into cases involving non-existent objects. But AV needn't be committed to presentism. Consider a case in which a subject decides to entertain a thought about a future person (for example, 'my sister's first great-grandchild'). I think it is plausible that the proposition entertained in this kind of case identifies that person (if anyone at all) by description. How else could the person in question be identified? If so, AV can claim that this thought is non-singular: it is about the person in question (if it's about anyone) because the proposition entertained concerns some properties or relations that the person uniquely satisfies. Alternatively consider a case in which a subject hears a name of some future individual. Presumably that name must've had its reference fixed by description. (How else could it have been fixed?). This kind of case should be treated as a descriptive name case, which I've already discussed. As such, I don't think there are obvious counterexamples to AV here.

There are probably other kinds of potential counterexample cases I could consider, but I'll stop here. My responses will be broadly repetitive of what I've said in the last few sections. Instead, I will wrap up this chapter and the first half of this thesis.

6. Conclusions to part one

My main conclusion in part one is that AV is a defensible view. Let's reconsider the four claims of AV:

- (AV1) A subject can entertain a thought that is singularly about *o* only if that subject is acquainted with *o*.
- (AV2) Some objects of acquaintance are ordinary objects.
- (AV3) A subject is acquainted with an object *o* iff that subject bears at least one of the following three relations to *o*: (i) perceptual acquaintance; (ii) memory acquaintance; (iii) communication-based acquaintance.
- (AV4) A thought is singularly about *o* iff that thought satisfies aboutness without properties with respect to *o*.

In this chapter I defended (AV1) from two kinds of objection: an undermotivation objection, according to which (AV1) is mere prejudice and not theoretically motivated, and some alleged counterexamples to (AV1). In response to the first objection, I presented AV as a theoretically motivated view that rests, at its foundation, on an empiricist claim about the explanatory role of perception in our cognitive lives. In response to the second

objection, I gave AV some options to respond to a series of counterexample cases, with a focus on descriptive name cases.

I have now explained and defended each of (AV1)-(AV4). In chapter 1, I explained and gave some initial motivation for (AV1)-(AV4) and I defended (AV4). In chapter 3 I explained and defended (AV2) and (AV3) in detail. In chapter 3 I also explored some puzzles or problems that occur as a consequence of holding (AV2), given my discussion of Russell in chapter 2. In chapter 4 I elaborated and precisified (AV4).

This completes part one of this thesis and my defence of AV. In part two, I will explore some of the consequences of holding AV. To finish, I'd like to highlight two ways in which my defence of AV has been somewhat conditional or incomplete:

First, as I explained in chapter 1, my defence of an acquaintance view—AV—depends on my choice of an account of singular thought. That said, my account of singular thought—given by (AV4) and precisified by (SA)—is a really good account of singular thought. There are reasons to accept it that are independent of a desire to defend an acquaintance view (see discussion in chapter 1, §4).

Second, as I explained in chapter 3, allowing acquaintance with ordinary objects raises some prima facie puzzles for any acquaintance view. These are partly inherited from Russell's writing on acquaintance. My solution to the puzzle of informative existential judgement (chapter 3, §6) gives AV an option for dealing with this puzzle. But I acknowledged there is something non-ideal about this solution. It's clear that AV needs to bite some bullets regarding informative existential judgement. I will discuss the puzzle related to informative identities in the next chapter and throughout part two of this thesis. I sketched a solution for AV to the puzzle regarding empty 'singular' thought (chapter 3, §7). But I said I need to say a little bit more about what propositions are entertain during episodes of thinking that purport to be singularly about the non-existent. I will return to this briefly at the end of chapter 9 (§9).

PART TWO

Chapter 6: Two Desiderata

1. The first desideratum

In part one of this thesis I defended AV. In part two I will explore the consequences of holding this acquaintance view. I will explore some of the commitments that need to be taken on by AV. I will focus on what account of propositions needs to be adopted. I will argue that AV needs to hold that propositions are structured and that, given certain assumptions, the constituents of these structured propositions need to be individuated in a way that is fine-grained enough to deal with informative, singular identity judgements.

In chapter 4 I argued that AV should understand and precisify (AV4) as follows:

- A thought or judgement is singular iff it has a singular proposition as its content.
- A proposition *p* is singular iff *p* is singularly about at least one object.
- A proposition *p* is singularly about an object *o* iff *p* satisfies aboutness without properties with respect to *o*.

I argued AV should understand the final bullet point, in more detail, in the following way:

(SA) A proposition p is singularly about o in w iff (i) for any world w^* : if p exists in w^* , then p is about o in w^* ; and (ii) it's not the case that p is about o in w merely by concerning one or more of o's properties in w^{142} .

This particular account of singular thought was a crucial part of my defence of AV. As such, any theory of propositions that can serve AV must meet the following desideratum:¹⁴³

142 Given singularity is relativised to a world here, strictly-speaking we should understand the middle bullet point above with: *A proposition p is singular iff there is some object o such that: p is singularly about o in every*

world in which p exists. Note that none of these bullet points or claims are rivals to or alternatives to the original (AV4). They just make (AV4) more precise.

This desideratum, and my claim that it commits AV to structured propositions, is contingent upon the idea that AV takes singularity to be a property of propositions, rather than of thought vehicles or concepts. My proposed solution to the problem of empty 'singular' thought requires this, although perhaps there could be versions of AV that give a different solution.

Singular Aboutness Desideratum (SAD) The theory of propositions must be compatible with the aboutness without properties account of singular thought from chapter 4. It must be able to give an account of propositions that accords with this.

The idea here is that the account of singularity from chapter 4—based on (AV4), which is made more precise by (SA)—is totally neutral about the nature of propositions. Any theory of propositions that can serve AV must explain how this contrast between singular and non-singular aboutness is manifested on their theory of propositions. And they must do so in a way that is fully compatible with the aboutness without properties account of singular thought (i.e. (AV4) and (SA)).

To clarify (SAD), I will explain how unstructured theories of propositions fail to meet this desideratum. In chapter 7 I will argue that on any unstructured theory of propositions it turns out that there will be—according to (AV4) and (SA)—a paradigmatically singular thought and a paradigmatically non-singular thought which have identical propositional content. The former is a thought that clearly satisfies aboutness without properties. The latter is a thought that clearly does not satisfy aboutness without properties. I will argue that unstructured propositions don't have enough fineness of grain to capture aboutness without properties. They fail to meet the desideratum (SAD) and cannot serve AV. AV requires the special kind of fineness of grain given by structure. I will argue this in chapter seven. 144

The simplest theory of structured propositions that can meet (SAD) is probably a Russellian view of propositions. On this view, propositions are structured entities that have objects, properties and logical operators as immediate constituents. My brief discussion of this view in chapter 4, §3, is enough to show this view can meet (SAD). ¹⁴⁵ If (SAD) is the only desideratum for a theory of propositions that can serve AV then, given propositions must be structured, AV should probably just adopt a Russellian view of propositions.

144

_

¹⁴⁴ Why should we care about this result? Recall what I said in chapter 1, §6 above. The particular account of singular thought given by (AV4) and (SA) was absolutely crucial to my defence of AV in part one of this thesis. I think the fact that this account of singular thought demands structured propositions reveals something interesting, and pretty surprising, about acquaintance views like AV.

¹⁴⁵ In particular, my claims about the relationship between (G2) and (C).

However, recall my discussion of informative identities in chapters 2 and 3. I've argued that Russellian propositions cannot account for non-descriptive informative identities and that AV cannot avail itself of descriptivist solutions to this problem. So *if* AV wants to account for informative identities at the level of propositions (i.e. say that the difference between an informative and trivial identity judgement is reflected in a difference in propositional content), there will be a second desideratum for a theory of propositions that can serve AV. This is a desideratum that the Russellian view of propositions cannot meet. I'll explain all this in a bit more detail in the next section.

2. The second desideratum

Here is the second desideratum for a theory of propositions that can serve AV:

Informative Identity Desideratum (IID) The theory of propositions must be able to deal with singular, informative identity judgements. It must not entail that informative and trivial identity judgements have the same propositional content. And it must not entail that all informative identity judgements are partially descriptive.

Unlike the first desideratum, (IID) is a conditional or optional desideratum. It's a desideratum *only if* AV wants to solve the problem of informative identities at the level of propositional content.

There are two broad ways that philosophers have tried to solve the puzzle of informative identities. The first way claims informative and trivial identity judgements can have the same propositional content. The difference between the judgements is explained in terms of a difference in the concepts or vehicles that actualise each episode of judgement. We could say that, on this approach, the difference between informative and trivial identity judgement is explained in terms of the syntax of judgement. The second way claims that informative and trivial identity judgements always have different propositional content.

_

¹⁴⁶ For recent approaches of this kind see Sainsbury and Tye 2012, Recanati 2012, Perry 2020, Crane 2011. This approach sometimes appeals to 'mental files'. For recent discussion of mental files, see the papers in Goodman, Genone and Kroll 2020.

¹⁴⁷ For recent(ish) approaches of this kind see, e.g., Evans 1982, Peacocke 1983, 2008; Chalmers 2002, 2011; Fine 2005; Campbell 2002; Lewis 1979, Ninan 2012, 2013. Frege 1892 and Russell 1905 also take this kind of approach.

On this approach, we would say there is a difference in *what is judged* between the two judgements. Hence there is a difference in informativeness.

We should recognise that it can sometimes seem as if there is not a deep difference between the two approaches. Those who take a vehicles-based approach are motivated to give a simple, course-grained account of content or propositions, where for example, propositions might be individuated by their truth-conditions. Perhaps this helps keep some strong continuity between our best compositional, semantic theories and our theories of the content of thought. The content-based approach is motivated to say that when there is some interesting and important difference between two thoughts (e.g. one is informative and one is not), then that must be reflected in a difference in what is thought or the content of thought. Here we are more interested in the role of content in explaining our dispositions to act or make inferences on the basis of our thoughts, than we are in the role of content in compositional semantics. ¹⁴⁸ This can sometimes seem like a terminological dispute about the proper application of the word 'content' or of the notion 'what is thought'. ¹⁴⁹

It is sometimes suggested that there is some problem with communicating informative identity thoughts on the vehicles or syntax view. ¹⁵⁰ But I won't try to develop this into a reason to prefer the propositional content view. I don't have much argument that we should prefer one approach to the other. The only claim I need here is that the idea that we should or must account for informative identities in terms of propositional content is a popular and serious position which AV may want to adopt. If AV *does* adopt this position, its theory of propositions must meet both (SAD) and (IID). Given my discussion in chapters 2 (§5) and 3 (§5), it should be obvious that Russellian propositions cannot meet (IID). If AV wants a theory of propositions that can meet (SAD) and (IID), I argue AV will be committed to the content of judgement being fine-grained in two specific ways: propositions must be structured, and their constituents must be individuated in a way that is fine-grained enough to deal with informative, singular identity judgement. I will

¹⁴⁸ For further discussion of issues related to these see Martin 2002, especially pp.187-190. Also see Heck 2012.

¹⁴⁹ For some broadly similar thoughts about content and propositions, see Crane 2011, pp.34-35.

¹⁵⁰ For discussion of this, see Prosser 2019; Fodor 2000; Heck 1995, 2002, 2012; Dickie and Rattan 2010; Aydede 1998.

consider two saliant accounts of fine-grained structured propositions and will argue in favour of a Fregean view.

Let's revisit some questions that I raised in chapter 1 (§6). Why does AV need to be particularly concerned with (IID)? What's the link between acquaintance views and informative identities? To answer these questions, let's think back to chapter 3 (§4). There I said that, to some extent, the problem of informative identities is a prima facie problem for everyone. However, I also said the problem bites particularly hard for acquaintance views like AV. Given (AV4), AV is strictly committed to the claim that all instances of singular aboutness are non-descriptive aboutness. In addition, acquaintance views like AV think the distinction between singular and non-singular thought really matters. They think this distinction carves out two fundamental psychological kinds. So AV cannot avail itself of any sort of descriptivist solution to the problem of informative identities. Also, as I said in chapter 2, Russell is the father of acquaintance views. And I've argued (chapter 2, §5) that Russell restricted the objects of acquaintance to sense-data in part because he was concerned about informative identities. As such, acquaintance views that do allow acquaintance with ordinary object should take extra special care that they have avoided any residual problems with informative identities. Informative identities are a saliant issue for acquaintance views, given their historical origins.

3. The plan for part two

In chapter seven I discuss the view on which propositions are unstructured sets of possible worlds. I argue that these views fail to meet either (SAD) or (IID). The possible worlds view struggles to make the required contrast between singular and non-singular propositions and struggles with singular informative identity judgements. I also argue that adding a two-dimensional semantics to this view of propositions doesn't solve these problems. I conclude that AV—which demands (SAD)—should look for a theory of propositions on which propositions are structured.

In chapter eight I discuss a structured propositions view that makes minimal changes to Russellian propositions, changes that are designed to deal with informative identities. This is Kit Fine's relationist view of propositions. As we would expect, this broadly Russellian view can easily meet (SAD). But I argue that its account of 'trading on identity'

is puzzling and unsatisfactory. I also argue that this undermines the relationist account of individual informative identity judgements. So it doesn't meet (IID) in a satisfactory way.

In chapter nine I discuss some Fregean views of propositions. I argue that two of these are good candidate theories of propositions to serve AV, and that they can meet both (SAD) and (IID). I don't commit to any one particular understanding of what senses are and I argue that what really makes Fregean views work for AV is the fact that they take propositions to be structured, combined with the fact that they individuate the constituents of propositions in a way that is fine-grained enough to deal with informative, singular identity judgements. Given this, I ultimately remain non-committal whether Fregean views are strictly the only option open to AV.

Chapter 7: Possible worlds and two-dimensionalism

1. Introduction

In this chapter I will argue that AV must hold that propositions are structured. An unstructured view of propositions cannot meet either (SAD) or (IID) from chapter 6. First, I will argue that the simplest unstructured propositions view—on which propositions are sets of possible worlds—cannot meet either (SAD) or (IID). This result is pretty immediate. Then I will argue that adding a couple of different variants of two-dimensionalism to this simple view doesn't help. I will consider a minimal Stalnaker-style two dimensionalism and the richer two-dimensionalism of David Chalmers. My diagnosis is that these issues—failing to meet (SAD) and (IID)—are due to a lack of structure in propositions. Any proponent of AV must hold a theory of propositions that meets at least desideratum (SAD). Therefore, AV is committed to structured propositions.

2. The simple possible worlds view

Merricks 2015, chapter 3.

The simple possible worlds view of content holds that the contents of beliefs, thoughts and judgements are propositions, where a proposition is a characteristic function from possible worlds into truth-values. Given that a proposition is a function into exactly two values, each proposition is uniquely determined by the set of possible worlds it assigns the value True. So sometimes possible worlds views claim that a proposition is a set of possible worlds, rather than a function.¹⁵¹

These claims can be motivated by the idea that inquiry, or getting information about the world, or improving one's epistemic position, is best modeled as involving the elimination of possibilities. The more information one has about the world and the more one knows, the more possibilities one is able to eliminate, such that a perfectly omniscient believer would narrow the possibilities down to exactly one: the actual world.

¹⁵¹ A major proponent of this kind of view is Robert Stalnaker. My introduction of the view follows some aspects of his 1984. Parts of the view originate with Hintikka 1962. For critical discussion see, for example,

Given this basic picture, the view claims that we should model a subject's overall epistemic position with the set of possibilities the subject has not yet ruled out or eliminated. This set can also be described as the set of worlds that are compatible with everything a subject believes. Let's call this set the subject's 'overall belief set'. As we find out more about the world and learn new things, we eliminate more and more possible worlds from this overall belief set. This epistemic aspect of the view will be important when we consider informative identities.

How do we model individual beliefs on the view; for example, the belief we would express with 'London is bigger than Brighton'? A subject believes this just in case London is bigger than Brighton in all the possible worlds in the subject's overall belief set. In other words, a subject believes that p just in case her overall belief set is a subset of p. The proposition expressed by 'London is bigger than Brighton' can be identified with the set of worlds in which London is bigger than Brighton.

3. The simple possible worlds view cannot meet (SAD)

(SAD) requires that a theory of propositions be compatible with the aboutness without properties account of singular thought from chapter 4. It must be able to give an account of singular thought and of singular propositions that accords with this.

There is an immediate problem with the idea that the possible worlds view can adequately draw a proper distinction between singular and non-singular thought. The possible worlds view entails that all necessary propositions are identical. Necessary propositions are true in all worlds, so on the view, they are identified with the set of all possible worlds. If we want to say that some necessary propositions are singular and some are non-singular, then the possible worlds view will fail to capture this distinction.

For example, let p be our most paradigmatic singular proposition, which satisfies aboutness without properties in an exemplary way. Let q be our most paradigmatic non-singular proposition (for example, let q be expressed by a sentence with logical form ' $\forall xFx$ '). Consider the following non-atomic propositions, built up from p and q:

- (1) $p \lor \neg p$
- (2) $q \vee \neg q$

p is singular. So presumably (1) is singular too. q is non-singular. So presumably (2) is non-singular too. But according to the simple possible worlds view, (1) and (2) are the same proposition. The account of singular thought from chapter 4 entails that (1) satisfies aboutness without properties while (2) does not. But the simple possible worlds view cannot deliver this verdict, since (1) and (2) are the same proposition. So the simple possible worlds view cannot meet (SAD).

Maybe this initial argument is a little too quick. Suppose p has logical form 'Fo'. This is what we'd expect from a paradigmatic singular proposition. On some versions of a trivalent, neutral free logic it's not the case that ' $Fo \lor \neg Fo$ ' is true in every world. ¹⁵² On this view atomic sentences of the form 'Fo' are undefined in a world in which o does not exist. And their negations are undefined too. Also the disjunction of two undefined formulas is undefined. So (1) isn't true in every world. Of course, moving to a trivalent logic breaks the simple view introduced in §2. We would no longer have a characteristic function to define a set of possible worlds. One option to deal with this involves minimal revision of the simple possible worlds view from §2. We could say that a proposition's function assigns any world in which that proposition is true to 1 and assigns any world in which the proposition is undefined or false to 0. This would be a characteristic function. A proposition expressed by a sentence of the form ' $Fo \lor \neg Fo$ ' would then not be the set of all worlds, but rather the set of all worlds in which o exists. So (1) and (2) would no longer be the same proposition, as long as o exists contingently. ¹⁵³

There's another reason that my argument above—from (1) and (2)—might be a bit quick. If one subscribes to the simple possible worlds view, it's just a given that one has to bite some pretty substantial bullets with respect to necessary propositions. For example, on most versions of the view, every subject automatically believes every necessary proposition, because any overall belief set is a subset of the set of all possible worlds. Equally, any subject who knows one necessary proposition knows every necessary proposition, because all necessary propositions are identical. We might think that, given

 $^{^{152}}$ I discussed this logic, very briefly, in chapter 3, 6. I allowed AV to appeal to free logics to avoid problems in part one of this thesis, so I should do the same for the simple possible worlds view.

hother option involves a more major revision to the simple possible worlds view. We could give up on the idea that propositions are sets of worlds which can be defined with a characteristic function. Instead, we'd identify propositions with a three-valued function or with a three-way partition of the space of possible worlds. Notice that this is a very different view to the view I introduced in §2. I don't think it is worth developing such a view here. The kind of trivalent logic we need here—with Weak Kleene truth-tables—isn't a particularly good logic and isn't widely accepted.

these apparently absurd consequences of the view, it is hardly surprising that the view cannot make the singular/non-singular distinction with respect to necessary propositions. So perhaps we should just bracket-off necessary propositions, if we are even considering adopting the simple possible worlds view.

But even if we allow the simple possible worlds view to bracket-off necessary propositions, or do something clever with free logic, the view is not out of trouble regarding (SAD). Let q^* be the proposition expressed by 'The actual G is F' in world w and let o be the unique G in w. This proposition does not satisfy aboutness without properties with respect to o in w. So according to (AV4) it is non-singularly about o in w. Given the 'actual' operator, q^* is also non-singularly about o in every world. So q^* is true in exactly the same worlds as our paradigmatically singular proposition p, which has logical form 'Fo' and which can be expressed by 'o is F'. ¹⁵⁴ As such, according to the simple possible worlds view, q^* and p are the very same proposition. But according to AV (and anyone who adopts (AV4)), p is singularly about o and q^* is non-singularly about o. So the simple possible worlds view cannot meet (SAD). I'll make two further points about this argument:

First, a possible worlds view cannot respond to this by saying: q^* is not singularly about o because it doesn't satisfy aboutness without properties with respect to o. The point is that q^* is the very same proposition as the paradigmatic singular proposition p. So if p satisfies aboutness without properties, q^* must do too. If q^* fails to satisfy aboutness without properties, p must fail to do so too.

Second, the trivalent free logic version of the possible worlds view I considered above won't obviously help here. On this view, p will be undefined in worlds in which o does not exist. q^* will probably be false in these worlds. However, p and q^* are still **true** in all the same worlds on this view. As I set up the trivalent possible worlds view, this is sufficient to make p and q^* the same proposition.¹⁵⁵

¹⁵⁴ This will be so independently of whether we treat definite descriptions as referential or Russellian (i.e. as introducing existential quantification into the logical form of the propositions they express). This is something I want to stay neutral about as far as possible. I'll briefly discuss this in chapter 9, §7.

¹⁵⁵ On the other version of a trivalent possible worlds view—where a proposition is a three-way partition on the set of possible worlds (see footnote 153 on p.151 above)—p and q^* could be different propositions, as long as definite descriptions are Russellian (and thus are false, rather than undefined, when empty). However, I won't pursue this here. I think this ends up at a slightly unstable and strange position, on which logic is trivalent but on which definite descriptions are Russellian. One key motivation of a Russellian treatment of definite descriptions is to preserve a bivalent logic.

For this reason, the simple possible worlds view cannot meet (SAD). The aboutness without properties account of singular thought doesn't work on the simple possible worlds view. Propositions aren't individuated with enough fineness of grain.

This result is sufficient for AV to reject the simple possible worlds view. However, I will also argue that the simple possible worlds view cannot meet desideratum (IID). Discussion of informative identities will motivate adding two-dimensionalism to the simple possible worlds view. This adds a little bit of fineness of grain to possible worlds propositions.

4. The simple possible worlds view cannot meet (IID)

Desideratum (IID) demands a theory of propositions that can deal with singular, informative identity judgements. In particular, such a theory must not entail that informative and trivial identity judgements have the same propositional content. And it must not entail that all informative identity judgements are partially descriptive (and thus not fully singular).

There's a fairly immediate problem here for the simple possible worlds view. Fully singular true identity propositions are necessarily true. So every singular true identity judgement has the same proposition as its content. This means that trivial true singular identity judgements and informative true singular identity judgements have the same propositional content. Note that this entails that a trivial true singular identity judgement and an informative true singular identity judgement will have the same propositional content *even if they concern different objects*. Even worse, as in §3, an informative true singular identity judgement will have the same propositional content as any judgement with logical form ' $\forall xFx \lor \neg \forall xFx$ '. This doesn't seem promising!

But this might be a little bit too quick. A bivalent negative free logic could help us here. ¹⁵⁶ The problem above is partly caused by the fact that identity propositions are necessary, and that no necessary propositions can be informative and non-trivial on the possible worlds view. But if we hold a negative free logic, not all identity propositions are necessary. Even propositions with logical form 'a = a' can be false in some worlds, namely in all worlds in which a does not exist. Roughly this means that 'a = a' would express the

 $^{^{156}}$ We could say something parallel about a trivalent free logic like that discussed in §3. I'll stick to a bivalent logic in this section, since this doesn't break my initial presentation of the simple possible worlds view. I needed a trivalent logic in §3 because my argument turned on failures of LEM.

same proposition as 'a exists'. This proposition would be contingent whenever a exists contingently. If we adopted this logic, then on the possible worlds view we'd still have to say that all singular, true identity judgements about a—including informative ones—have as their content the same proposition that is expressed by 'a = a'. But this proposition will be contingent: it is true at a world iff a exists at that world.

Does this help with the problem above? A little. The simple possible worlds view would no longer be committed to the idea that *all* true singular identity judgements have the same propositional content, including all those that each concern different objects. They would no longer be committed to the idea that all true singular identity judgements have the same propositional content as a judgement with logical form ' $\forall xFx \lor \neg \forall xFx$ '. However I don't think negative free logic helps enough here. When we model the state of mind of someone who comes to learn a true non-trivial identity, we don't want to say that what they learn is that the object exists. They probably already knew this. What they learn is (in some circumstances) a surprising fact about the identity of two apparently non-identical objects. For these reasons, I'll set aside free logic here.

There's another way for the simple possible worlds view to deal with informative identities. They can claim that all singular, informative identity judgements are *partially descriptive*. To bring this out, it'll be helpful to consider a more concrete case.

Reconsider my bee case from chapter 2 (§5). A bee is currently buzzing by my window. Yesterday, a bee crawled into my hair. It turns out that the same bee has visited me twice. If I found out that the same bee visited me twice, this would surprise or interest me. I would have learnt something interesting about the world. I don't want any of our discussion to turn on the semantics of demonstratives and how context may affect this. So I'm going to add to the example that I coin two names for the bee: I coined 'bee_T' when I saw the bee today and 'bee_Y' when I saw it yesterday. Consider the proposition I express with 'bee_T is the same as bee_Y '. We want this to express an informative identity proposition. On the simple possible worlds view, the most natural suggestion for the proposition I express is given by the following set:

```
\{w : bee_T = bee_Y \text{ in } w\}
```

We just saw there are real problems with this suggestion. Given a classical logic, this proposition cannot be informative, because it is necessary. It is the same proposition that might be expressed with ' $bee_T = bee_T$ ' or even ' $\forall xFx \lor \neg \forall xFx$ '. At best, if we adopt a negative free logic, this proposition is the same as the contingent proposition that could be expressed by ' bee_T exists'. But I said that this proposition doesn't seem informative in the right way.

Perhaps, instead, the simple possible worlds view could claim the proposition I express in this situation is given by the following set:

```
\{ w : (bee_T = \text{the bee I saw yesterday}) \text{ in } w \}
```

Call this proposition p^* . p^* is a contingent proposition that is true in the actual world but false in other worlds. By judging p^* I eliminate some possible worlds from my overall belief set: all the worlds in which I didn't encounter the same bee twice. On the face of things, it is fairly plausible to say that p^* is singularly about b in the actual world. (It's also non-singularly about b in the actual world.) So p^* seems to be a singular, informative identity proposition. Does this solve the problem of informative identities for the simple possible worlds view?

No. The response I'm considering here is that all informative singular identity propositions are *partially descriptive*. They are both singularly about and non-singularly about the object in question. Recall that I considered exactly this sort of response in my discussion of Russell in chapter 2, §5.1. ¹⁵⁷ There are argued that this response is unsatisfactory. The same applies here. Why shouldn't there be *fully singular* informative identity judgements, i.e. judgements that are not also non-singularly about the object in question?

There's a further problem with this partially descriptivist response in this context, due to the fact that propositions are unstructured on the possible worlds view. Consider a judgement expressed by 'The actual bee I saw today is the same as the bee I saw yesterday'. The proposition expressed can be given by the following set:

 $\{ w : (The actual bee I saw today = the bee I saw yesterday) in w \}$

155

¹⁵⁷ In particular, the claim that all informative, singular identity judgements have a logical form like $\exists x (Fx \land \forall y (Fy \rightarrow x = y) \land x = b)$

This proposition is the same as p^* . But according to AV's account of singular thought, this second proposition is only non-singularly about the bee. So p^* can't be singularly about the bee after all. Again: the aboutness without properties account of singular thought simply doesn't work on the simple possible worlds view. Propositions aren't individuated with enough fineness of grain.

For these reasons, the simple possible worlds view cannot meet (IID). Again, my main diagnosis of this is that the view doesn't individuate propositions with enough fineness of grain. However, some proponents of the simple possible worlds view have added a version of two-dimensionalism to their view in order to help with informative identities. In a sense, this adds a tiny bit more fineness of grain to propositions, on the possible worlds view. I'll consider this in the next section. I'll argue this doesn't help with either (SAD) or (IID). Then, in §6 and §7, I'll consider more sophisticated two-dimensionalist views that build upon the view I'll present in §5.

5. Diagonal propositions

5.1

On the possible worlds view we can represent a proposition p with a one-dimensional matrix like the following:

w_1	w_2	W 3	w_4	•••
T	Т	F	F	

This represents the idea that p (considered as characteristic function) assigns worlds w_1 and w_2 the value True, and worlds w_3 and w_4 the value False. In other words, p (considered as a set of worlds) contains w_1 and w_2 and doesn't contain w_3 or w_4 .

The kind of two-dimensionalism I'm interested in here holds that there is more to say about this proposition p, or rather, about particular judgings of p. Suppose a subject uses sentence s to express p in the actual world. Let's call the actual world w_1 . We could also think about what proposition the subject would've expressed if she had uttered s in

different worlds, for example in world w_2 or w_3 . We can capture these ideas with a two-dimensional matrix:¹⁵⁸

	w_1	w_2	w_3	\mathcal{W}_4	•••
w_1	T	Т	F	F	
w_2	F	F	Т	F	
w_3	F	F	F	Т	
W_4	F	Т	F	Т	
÷	:	:	:	:	=

Each row here represents a proposition. The first row gives us p. The second row gives us the proposition our subject would express with s, if she uttered s in w_2 . And so on. Stalnaker calls what this table represents a *propositional concept* (1978, p.81). We can think of this as a function from possible worlds to propositions. For example, the propositional concept above sends w_1 to the proposition represented by the first row.

What's the point of introducing this propositional concept? As I understand Stalnaker, it is supposed to capture something about the broader state of mind of a subject who judges a proposition they would express with s in w_1 . Stalnaker holds that which sentence a subject uses to express a proposition (in a world) can be an imperfect guide to what proposition a subject is judging (in that world). To work out what proposition a subject is judging, we don't always have to take our standard semantic rules and compute the proposition corresponding to the sentence in that world. Rather we can also look at the subject's broader state of mind in that world. One way to do this is to look at what proposition the sentence the subject used to express their judgement *would've* expressed if it were used or uttered in different worlds. This kind of information is encoded by a propositional concept. 159

¹⁵⁸ This is a version of Stalnaker's meta-semantic two-dimensionalism (see his, e.g., 1978, 1987).

¹⁵⁹ Stalnaker writes: "In general, to understand the content of a person's belief, ask what the world would be like if the belief were correct. What is the world like, according to the person's conception of the way the world is? […] I will approach the question holistically. That is, I will not begin by looking at the sentences which express or ascribed the belief and ask what proposition seems to be determined by the semantical rules for such sentences. Instead I will ask what alternative possible situations seem, according to the story as a whole, to be compatible with the agent's beliefs." (1981, pp.136-137). Propositional concepts are supposed to help with this task. Also see his 1987, p.125-127ff.

A propositional concept is not a proposition. It is not something that is true or false. So it cannot itself be the content of a judgement. But, on Stalnaker's two-dimensionalism, what propositional concepts give us are *diagonal propositions*, which can be contents of judgement.

We just said that Stalnaker doesn't think that an utterance of a sentence in a world always expresses the proposition directly determined by the propositional concept for that sentence, i.e. the proposition given by the row for the world of utterance (1987 p.124). Instead, it may express the proposition given by the diagonal of the matrix. I already put this in bold on the matrix above. This diagonal proposition may or may not also be represented in a row on the matrix.

When does a sentence express a judgement with a diagonal proposition as its content? Putting things very roughly: whenever we seem to model a subject's state of mind (in w) in the wrong way by attributing them the judgement given by w's row in the propositional concept, we can instead attribute to them the judgment that has the diagonal proposition as its content, if this proposition better models the subject's state of mind. In Stalnaker's terms, we can attribute a diagonal proposition when we seem to get the subject's conception of the way the world is wrong by attributing to them the proposition determined by the ordinary semantic rules for the sentence they uttered (which will be the row corresponding to the world of utterance in the matrix). 160

Essentially what's going on here is that we are considering possible worlds in two different ways: as actual (down the rows of the matrix) and as counterfactual (across the columns of the matrix). We can think of this as, in a sense, adding a little more fineness of grain to possible worlds propositions.

It's important to note that the version of two-dimensionalism I'm going to be interested in for this thesis is most directly a two-dimensionalism about the content of judgements, rather than about the meaning of sentences, utterances or assertions. ¹⁶¹ So let's extend the picture above in a way that I think Stalnaker himself would be suspicious of. ¹⁶² Let's say that the propositional concept given by the matrix above not only tells us what our subject would've **expressed with her utterance** s in different worlds, but also tells us what

¹⁶⁰ For example, see Stalnaker 1987, p.124.

¹⁶¹ For this distinction see Stalnaker 1987, p.120.

¹⁶² See, for example, his 1990, p.198.

judgement she would've made in these different worlds, if she made a judgement in similar circumstances to those of the judgement she actually made. (So the two-dimensionalism I'll discuss doesn't require that a subject actually makes any utterance to express her judgement.)

5.2

Some proponents of the possible worlds view of propositions—including Stalnaker himself—use diagonal propositions to deal with informative identities.¹⁶³

Reconsider my bee case from §4. Let's focus on my surprising, informative identity judgement, expressed with 'bee_T is the same as bee_Y '. Let's label the proposition I judge q. Let w_1 be the actual world. Let's call the bee in question 'b'. We can represent q with the following one-dimensional matrix.

w_1	w_2	W_3	W_4	•••
Т	Т	Т	Т	

Now there is certainly a sense in which, given discussion in §4, attributing this necessary proposition q to me doesn't properly capture my state of mind, when I make my informative identity judgement in w_1 . One way to more fully model my state of mind is to work out what judgement I would've expressed in other worlds, with my sentence 'bee_T is the same as beey' (or, in less linguistic terms, what proposition I would've judged in other worlds, if I were in similar circumstances). 164

It is clearly possible, epistemically and metaphysically, that I could've seen two bees rather than one bee. Let w_2 be a world that is exactly the same as w_1 except that two different bees visited me in w_2 . In w_2 I saw bee c yesterday and bee b today. Suppose that w_1 and w_2 are totally identical except for these facts about the identity of the bees. The matrix above tells us that q is true in w_2 . This is because q is about b (and only about b) in w_2 and b is self-identical in w_2 . At the level of language, we could say my use of 'bee_Y' (in

¹⁶³ See Stalnaker 1987, p.123ff.. In this paper Stalnaker is most directly concerned with the semantics of belief attribution sentences rather than beliefs or judgements themselves.

¹⁶⁴ As I've mentioned, I think Stalnaker himself would be suspicious of this non-linguistic gloss (1990, p.198) but I won't worry about this.

 w_1) refers to b in every possible world, even in a world in which c (not b) visited me yesterday.

But we can ask, what proposition would I have expressed with the sentence 'bee_T is the same as bee_Y ' if I had expressed this in w_2 ? It is plausible to say that my use of 'bee_T' in w_2 would've referred to b and my use of 'bee_Y' in w_2 would've referred to b. (When we say this we are considering b0 as actual; in the previous paragraph we were considering it as counterfactual.) We can put these ideas in less linguistic terms. If things were exactly the same in b0 (as they were in b1) except for the identity of the bees, then the content of my judgement in b2 would've been about two bees rather than one bee. If that's correct, I express and judge a different proposition in b3. The proposition I express with 'bee_T is the same as bee_Y ' in b2 is necessarily false. I refer to two different bees in b3 and I'm mistaken about their identity.

To build a useful two-dimensional matrix, I'm going to stipulate some facts about two more worlds. Here are all the facts about the identity of the bees:

- In w_1 yesterday's bee = b; today's bee = b
- In w_2 yesterday's bee = c; today's bee = b
- In w_3 yesterday's bee = d; today's bee = e
- In w_4 yesterday's bee = e; today's bee = e

All these worlds are exactly the same except for the identity of the bees, and $b \neq c \neq d \neq e$. Here is the propositional concept that more fully models my state of mind in w_1 :

	w_1	w_2	w_3	\mathcal{W}_4	•••
w_1	<u>T</u>	Т	Т	Т	
w_2	F	<u>F</u>	F	F	
w_3	F	F	<u>F</u>	F	
w_4	Т	Т	Т	<u>T</u>	
:	:	:	:	:	•

Let's return to w_1 . We said q (row w_1) seems to be the wrong proposition to model my judgement in w_1 , not least because q is something I recently learnt and that I found

surprising. (Recall no necessary propositions can be informative and non-trivial on the possible worlds view.) Given this, we have permission to diagonalise. A two-dimensionalist could say that the proposition I judge in w_1 is really the diagonal proposition, in bold and underlined in the above matrix.¹⁶⁵

Let's call this proposition d. Notice that d is not a necessary proposition. It is true in w_1 and w_4 but false in w_2 and w_3 . So d is plausibly something I could learn or find out on the possible worlds view. It's not something I knew all along. When I judge d, I can eliminate worlds from my overall belief set (namely w_2 and w_3). d, unlike q, seems like an informative identity judgement. This is what we were after.

On the face of things, this is a neat solution to the problem. But there's a new problem here. d is clearly not singularly about b in w_1 . It fails both AV's conditions for singularity from chapter 4. Although d is about b in w_1 , d is not necessarily about b. This is because it is not about b in w_3 and w_4 . In fact d is doubly non-singular, since there's good reason to think that d fails to satisfy the second, negative condition for singular aboutness in (SA) from chapter 4. It's plausible that d is about an object in each world because d concerns properties that that object uniquely satisfies in that world.

To see this, we can ask: Why is d about b in w_1 ? Given the way d was generated, the answer seems to be something like: because b fulfils a certain role in w_1 . b is the bee that got caught in my hair yesterday in w_1 and b is the bee that is buzzing by my window in w_1 . d is about b in w_1 because b happens to fulfil at least one (in fact both) of these roles in w_1 . More simply, we can say b is the bee I saw yesterday and b is the bee I saw today in w_1 . In a sense, d is about b in w_1 because b satisfies at least one of (and in fact both of) these underlined descriptions in w_1 . And the reason why d is not about b in w_3 and w_4 is that b satisfies neither of these underlined descriptions in w_3 and w_4 .

Also notice, to reinforce the idea that d is not singular, that we don't have to use the propositional concept above to identify or pick out d. d can be identified or picked out with the following set:

¹⁶⁵ A somewhat similar case (involving informative identities and names) is discussed in Stalnaker 1987, p.123ff.. In this paper Stalnaker is more concerned with the semantics of belief attribution sentences.

 $\{ w : (\text{The bee I saw yesterday} = \text{The bee I saw today}) \text{ in } w \}^{166}$

So there's a sense in which d is really a descriptive proposition, which happens to be about b in w_1 because b satisfies one (or both) of these descriptions in w_1 .

As such, I think there's a real similarity between Russell's solution to this problem (via his retreat to descriptions) and the diagonalisation solution to this problem. The challenge in the second desideratum was to give a plausible account of *singular* informative identity judgements. But this solution fails to do this in much the same way as Russell's retreat to descriptions does. We can only solve the problem by denying the informative identity judgement is fully singular.

So, even if we combine the possible worlds view with a Stalnaker-style twodimensionalism, the view cannot meet (IID). Two-dimensionalism adds a tiny bit of extra fineness of grain to propositions (by considering worlds as actual and as counterfactual), but not enough.

5.3

Can diagonal propositions help with (SAD)? I will quickly argue not. Recall that the problem with (SAD) on the simple possible worlds view was that a paradigmatic singular proposition and a paradigmatic non-singular proposition, expressed by 'The actual F is G', can end up being identical propositions. So either both are singular or both are non-singular.

Diagonalisation won't help here because the diagonal proposition for the sentence 'The actual F is G' (expressed in w) is just the proposition expressed by 'The F is G' in w. It's really hard to see why we'd ever attribute this diagonal proposition to a subject who expresses their judgement with 'The *actual* F is G'.

To make this explicit, consider the sentence 'The actual F is G' expressed in world w_1 . Ordinarily, this expresses a proposition p such that:

• For any world w: p is true in w iff [the F in w_1] is G in w.

¹⁶⁶ To get to d we should make the descriptions more detailed, but this doesn't matter for our purposes. The descriptions in d basically need to describe the role of bee_T and bee_Y . This role fixes which object the

diagonal proposition is about, in each world.

In W_2 , 'The actual F is G' ordinarily expresses a proposition p^* such that:

• For any world w: p^* is true in w iff [the F in w_2] is G in w.

And so on for all other worlds. If [the F in w_1] \neq [the F in w_2] then it could be that $p \neq p^*$. The diagonal proposition d^* for 'The actual F is G' has the following truth-conditions:

• For any world w: d^* is true in w iff [the F in w] is G in w.

Given this, the diagonal proposition is just the proposition normally expressed by 'The F is G' in w_1 . Plausibly, d^* is not identical to any singular proposition. So if we could say that a subject who judges 'The actual F is G' in w_1 really makes a judgement with this diagonal proposition d^* as its content, we could potentially avoid the problem regarding (SAD). We would avoid the result that a paradigmatic singular proposition and a paradigmatic nonsingular proposition, expressed by 'The actual F is G', can end up being identical propositions.

The problem is that it is really hard to imagine why we'd want to diagonalise in this case. I said in §5.1 that we can diagonalise only when: (i) we seem to get a subject's state of mind wrong when we attribute to them the proposition given by the relevant row on the propositional concept matrix; and (ii) we model the subject's state of mind better when we attribute to them the diagonal proposition from the propositional concept matrix. Perhaps there are some cases when condition (i) is met for 'The actual F is G'. But unlike with the informative identity example, it's really hard to imagine a situation in which we'd better model the state of mind of a subject who judges 'The actual F is G' with the diagonal proposition d^* , than we would with the ordinary row proposition (i.e. p above). Why would the subject express their judgement with 'actual' if they were really judging merely that 'The F is G'? I don't think there's any good answer to this question.

That said, this discussion of diagonal propositions will enable us to consider a more rich and interesting two-dimensional view.

6. Enriched propositions

Can we diagnose what has gone wrong here for the simple possible worlds view, regarding (SAD) and (IID)? I think it is natural to say that all the problems have to do with the fineness of grain with which the simple possible worlds view individuates propositions.

The simple possible worlds view is doubly coarse-grained. It's coarse-grained because propositions are unstructured and it is coarse-grained because it quantifies over (metaphysically) possible worlds, rather than a more fine-grained notion of a world. Going two-dimensional adds a little bit of fineness of grain. Essentially this allows us to consider each possible world in two different ways: as actual and as counterfactual. But this isn't nearly enough for (SAD) and (IID) and for AV.

This suggests we should look for theories of propositions that give us more fineness of grain. Before we dismiss possible worlds views in general, I want to consider two modifications we could make that might give us more fineness of grain, within the same broad framework. Both are based on David Chalmers' two-dimensionalism. I'll argue that neither modification leaves us with a view that can meet either (SAD) or (IID). It'll turn out that we need more *structure* in our propositions to meet either of these desiderata.

We can motivate one of Chalmers' modifications of the possible worlds framework by reconsidering informative identities. The two-dimensionalist solution to the problem of informative identities, and indeed Russell's own descriptivist solution, can seem as if it is stuck between two unattractive options. On the one hand, a necessary identity proposition gives us the right truth-conditions. But this proposition doesn't have the right epistemic profile, on these views. It isn't informative. On the other hand, a descriptive identity proposition (e.g. a diagonal proposition) gives us the right epistemic profile and the right information update. But it doesn't have the right truth conditions or the right singularity.

It can seem as if we want both these propositions to be the object of judgement, or to somehow combine them. But on the classical possible worlds view (and on Russell's view) this isn't possible. We have to choose.

David Chalmers has hinted toward a view on which we might not have to choose. We might be able to have both. How would this work?

Chalmers claims we can take a judgement or belief to have a content which combines a diagonal proposition and a row in a matrix. In his 2011 paper he calls this an *enriched* proposition (p.600).¹⁶⁷ On one way to understand this, an enriched proposition would be

.

¹⁶⁷ By 2011 Chalmers has moved to a structured propositions view, which is different to the kind of view we're discussing here. However, there is evidence of this enriched proposition view in his 2002 paper, in which he thinks propositions are unstructured sets of worlds or scenarios. I'll discuss the structured version of his view in chapter 9, §5.

an ordered pair of a row in a matrix and the diagonal proposition of that matrix (2002, p.165; 2011, pp.599-601).

How could this help with informative identities? Well we could say that my true non-trivial identity judgement (expressed by ' bee_T is the same as bee_Y ') has as its content an enriched proposition, where this is an ordered pair:

$$\langle q, d \rangle$$
.

q is the necessary proposition given by the w_1 row in the matrix in §5.2. This is given by the following set:

$$\{w: bee_T = bee_Y\}.$$

And *d* is the diagonal proposition from this matrix, which is, roughly speaking, given by the set:

```
\{ w : \text{the bee that I saw today} = \text{the bee I saw yesterday} \}.
```

Let's call this enriched proposition e^* . The idea is that e^* is singular because it contains a singular proposition about the bee b, namely q. And e^* is informative, because d is an informative, non-trivial, contingent proposition. On this view we'd have to modify some of the epistemic aspects of the possible worlds view (described in §2 of this chapter). For example, it could be that it is only the second component of an enriched proposition that would change a subject's overall belief set.

I will raise three problems with the enriched propositions view. The first two problems may not be decisive. The third problem is decisive and will allow us to move on from and reject the idea that any sort of unstructured two-dimensionalism can meet (SAD) or (IID).

The first obvious initial problem is that it's just a mistake to think that q is a singular proposition, given my discussion in §§3-5. Since q is a necessary proposition, on the possible worlds view it is the very same proposition that is expressed by any necessarily true sentence. For example, it is the very same proposition that is expressed by ' $\forall xFx \lor \neg \forall xFx$ '. This means we can't really say that q is singular. And we can't really say that q is about b.

However recall our brief mention of negative free logic in \$4. We said that the possible worlds view may be able to give a more plausible account of proposition q if it adopts a

negative free logic. On this logic, q will no longer be necessarily true, since 'b = b' (and ' $bee_T = bee_Y$ ') is false in any world in which b does not exist. So if we adopt a negative free logic, q will be identical to the following set: {w : b exists in w}. If b is a contingent object (such as a bee) then this set won't contain every world. By judging this, a subject could potentially eliminate some worlds from her overall belief set.

I rejected this proposal in §4 because this understanding of q doesn't make q informative in the right way. What we should learn, when we learn q, isn't just that b exists. Rather it's a potentially surprising fact about the identity of apparently distinct bees. But in this context, this isn't obviously a problem. q is just one component of an enriched proposition e^* . All we need is for q to be a proposition that is singularly about b. The informativeness of e^* can be captured and dealt with by the second component of e^* , which is d.

Is q singularly about b, given a negative free logic? Well one impediment to this idea has been removed. q is no longer identical to every necessary proposition (including all non-singular ones). It is fairly plausible to think that q is necessarily about b. It's not totally clear q satisfies aboutness without properties with respect to b. But it is hardly obvious it does not. So we can tentatively conclude for now that q could be singularly about b, given a negative free logic.

The second problem with enriched propositions is just that all this can seem like cheating. How can one proposition be two propositions? One way to put this worry is to ask: What's the truth-value of e^* in any given world? What is e^* about in any given world? In many cases there will be two different answers to both these questions: one determined by d and one determined by q. Given this, we might think that e^* is not any kind of proposition.

I think Chalmer's response would be to say that propositions are only about objects or have a truth-value relative to a world. Worlds play two different roles on two-dimensionalist views, so e^* has two different kinds of truth-conditions and two different sets of aboutness properties. He calls the two different kinds of truth-conditions e^{*} 's epistemic truth-conditions vs. its subjunctive truth-conditions (2002, p.165). We could call the two different sets of aboutness properties e^{*} 's epistemic aboutness properties vs. its subjunctive aboutness properties. But we might still worry that e^{*} isn't really a proposition. After all, e^{*} 's epistemic truth-conditions and its subjunctive truth-conditions might

conflict with each other. We can say the same about its epistemic aboutness properties and its subjunctive aboutness properties (in other words, q and d might be about different objects at different worlds).

To deal with this worry, it might be possible to define a single set of truth conditions for e^* as a function of both its subjunctive and epistemic truth-conditions (and a single set of aboutness properties for e^* as a function of both its subjunctive and epistemic aboutness properties). We could call these e^* 's *enriched* truth-conditions and *enriched* aboutness properties. I'm not totally sure how this would work, but it is a possibility. However, rather than pursue this, I want to press a more decisive problem for the enriched propositions view. This third problem will allow us to move on from two-dimensionalism.

The third problem is that the enriched propositions view will give the wrong verdict about the actual F cases. It can't meet (SAD). It fails to meet (SAD) in a way that entails it can't meet (IID) either. To show this concisely, let's stipulate some things:

- o is the unique F in w.
- p_1 is the ordinary possible worlds proposition expressed by 'The actual F is G' in w.
- d_1 is the diagonal proposition for a judgement expressed by 'The actual F is G' in w.
- p_2 is the ordinary possible worlds proposition expressed by 'o is G' in w.
- d_2 is the diagonal proposition for a judgement expressed by 'o is G' in w.
- e_1 is the enriched proposition (p_1, d_1) expressed by 'The actual F is G' in w.
- e_2 is the enriched proposition $\langle p_2, d_2 \rangle$ expressed by 'o is G' in w.

Let's suppose that p_2 and e_2 should be paradigmatic singular propositions. If any propositions are singular, these propositions must be. Given my argument in §3, I hope it's clear that $p_1 = p_2$. It may be that $d_1 \neq d_2$. But this doesn't really matter for now. The key thing I want to suggest is:

(*) If $p_1 = p_2$, then (e_1 is singularly about o in a world iff e_2 is singularly about o in that world).

After all, we said above that a singular enriched proposition's singularity is accounted for only by the first element of the ordered pair. If these first elements are identical, how can e_1 and e_2 differ with respect to their singularity?

 e_2 is supposed to be singularly about o. AV (and anyone who holds AV4) would classify e_1 as only non-singularly about o. But given (*) the enriched proposition view can't give these verdicts. The only way we could reject (*) is if we could somehow define e_2 's enriched aboutness properties—where these are a function of its subjunctive and epistemic aboutness properties—such that: e_2 can be singular with regards to its enriched aboutness properties and non-singular with regards to its subjunctive aboutness properties (or vice versa). It's extremely hard to see how this could work.

However, I want to argue that, even if this were possible, the enriched propositions view will still be in trouble regarding (SAD). To see this let's consider a case in which we stipulate that the property F above fully describes or captures the 'role' of o in w, in relation to judgement p_2 . This role is what we used to identify which object our judgements would've been about if they had been entertained in different rows of a matrix. For example, we used this kind of role to identify which bees my judgement would've been about in different rows of the matrix in §5.2. This role determined which bee the diagonal proposition was about at each world. If we stipulate the property F fully describes or captures this role for o with respect to p_2 , it should be clear that $d_1 = d_2$. The diagonal proposition for p_2 will be about whatever plays the role (described by F) at each world. And the same is true of the diagonal proposition for p_1 . We've already said $p_1 = p_2$. So if we add that $d_1 = d_2$, then clearly $e_1 = e_2$. But AV (and anyone who holds AV4) wants to say that e_2 is singular while e_1 is not.

In fact, stronger than this: the matrices or propositional concepts for both judgements will be identical in this case. This is because, given our stipulation, asking what object plays the role of o in different rows of a matrix is just the same as asking what object is the F in different rows of a matrix. This point is fairly devastating for the idea that two-dimensionalism can provide a theory of propositions to serve AV and meet (SAD). If a paradigmatic singular judgement and a non-singular judgement can have identical propositional concepts associated with them, a two-dimensional view really will not have the resources to meet (SAD).

Now this objection does rely on the idea that these roles of objects can be encoded or captured by a description. Maybe it could be replied that these roles are likely to be more ineffable than this. Even if that's right, we can retreat to my previous objection. It's

extremely hard to see how enriched aboutness properties could be defined in a way that makes (*) false.

This means that the enriched proposition view cannot meet (SAD). So it cannot serve AV. Equally, this argument entails that it is mistake to think that proposition q above (given by the set $\{w: bee_T = bee_Y\}$) is singularly about the bee in question. Enriched propositions cannot give the content of *singular* informative identity judgements. So the view cannot meet (IID) either.

7. Epistemic two-dimensionalism

In the previous section I omitted the fact that David Chalmers' two-dimensionalism differs in another way from the view I presented in §5 (which is roughly Stalnaker's two-dimensionalism). Chalmers quantifies over *epistemically* possible worlds as well as ordinary possible worlds. Given my diagnoses of why the possible worlds view struggles to meet (SAD) and (IID), a defender of a possible worlds view should be keen to adopt a more fine-grained account of propositions. On the face of things, epistemically possible worlds might be individuated more finely than ordinary possible worlds. But in this section I'll explain why this fineness of grain won't help us. Essentially I will argue that this aspect of Chalmers' view won't make a difference to the arguments above.

Chalmers holds there are two kinds of proposition. These correspond to primary intensions and secondary intensions. (We can think of these as intensions *of* sentence tokens or of a proposition considered relative to a particular world.) A secondary intension is just the familiar possible worlds proposition introduced in §2 of this chapter. This is a function from ordinary possible worlds to truth-values. A primary intension is a function from *scenarios* to truth-values. These primary intensions roughly play the role that diagonal propositions played in the non-epistemic two-dimensionalism discussed above.

Chalmers holds that scenarios are epistemically possible worlds. We can think of these as a "maximally specific way the world might be, for all one can know a priori ... [F] or any scenario it is epistemically possible that the scenario is actual" (Chalmers 2006, p.76). In other words, epistemic scenarios are all the ways the world might actually turn out to be, for all we can know a priori. This might include scenarios that are, in a certain sense,

_

¹⁶⁸ For a helpful presentation of Chalmers' view, see Sainsbury and Tye 2012, chapter 2.4.

metaphysically impossible. For example, if it's true that Hesperus is Phosphorus in the actual world, then this is also true in any possible world. But, for all we know a priori, in the actual world it might turn out that Hesperus is not the same thing as Phosphorus. So there is an epistemically possible scenario in which Hesperus is not the same as Phosphorus. What could such a scenario look like? Well roughly we can say, the thing that plays the Hesperus role in the scenario and the thing that plays the Phosphorus role in the scenario turn out to be different objects. We can think of the Hesperus role as, for example and very roughly, appearing in a certain way, at a certain time of day, and being called 'Hesperus'. We can think of these roles as being the same as the roles I discussed in \$5 regarding Stalnaker-style two-dimensionalism.

It's easiest to think of scenarios as idealised, maximally specific *descriptions* of all the ways the world could be, for all we know a priori. There are some serious complications about what form these descriptions can take, but I'll set these aside here.¹⁶⁹

There's one more important issue for us to deal with: What is it for a proposition to be true in this kind of epistemic scenario? When does a primary intension send a scenario to the value True? Roughly we can say:

p (a primary intension) assigns a scenario w_e to True iff (w_e and not-p) is not a priori incoherent.¹⁷⁰

The idea is that w_e is assigned True by p's primary intension iff: if an idealised rational subject supposed they were in scenario w_e , that subject would endorse p (Chalmers 2011, p.598). Note that the view assumes that if a subject supposes they are in w_e then they know everything there is to know about w_e . This is one of the ways in which the subject is idealised.

In the background, driving this view, is the fact that Chalmers wants to establish some substantive claims about the connections between meaning, a priority and possibility (2006, p.55). The key aim is to substantiate the claim that a sentence or proposition has a necessary primary intension iff it is a priori.

¹⁶⁹ See Chalmers 2006, pp.83-89.

 $^{^{170}}$ I adapt this from Laura Schroeter (2017, §5.2). For Chalmers' much more complex gloss, see his 2006, pp.77-81ff. In order for the bit in brackets to make sense, we might need w_e to be a proposition that describes all the details of the scenario in question.

However, these are not things I am particularly concerned with. And actually I think the way I've described the view so far is already enough to show us that there is not going to be a large difference between Stalnakerian diagonal propositions and Chalmers' primary intensions, for our specific purposes. This is because:

(a) the main kind of cases where epistemic two-dimensionalism *might've* helped us are cases of informative, a posteriori, necessary identity judgements. These will always be associated with a contingent primary intension, on Chalmers' view, since they are not a priori. But my presentation of Stalnakerian two-dimensionalism already allowed these judgements to be associated with contingent diagonal propositions (see §5). So there's no clear advantage to moving to epistemic two-dimensionalism here.

(b) which objects these primary intension propositions are about in different worlds will be determined by which object plays a certain *role* in that world. This is enough to make these primary intensions every bit as non-singular and descriptive as diagonal propositions. If so, all the same problems from §4-6 will still arise.

The main difference between the views is that Chalmers' will never give an a priori judgement a contingent primary intension, but the Stalnakerian view might do so, on occasion.¹⁷¹ This doesn't really matter or make a difference to my argument above.

Would there be any advantage at all to adopting epistemic two-dimensionalism? I can only think of one advantage for my arguments in this chapter. We might be a bit suspicious of the method I used in §5 to construct our matrices and diagonal propositions, by considering possible worlds as actual. For example, maybe it doesn't really make sense to ask, as I did, what the content of a judgement *would've been* if it had been made in a different possible world. Chalmers' method for constructing primary intensions is at

171

¹⁷¹ An example: It may be that my judgement expressed by 'Optometrists are eye doctors' could be associated with a contingent diagonal proposition. Imagine a world w that is exactly like the actual world, except that the role of dentists and optometrists are swapped, in the sense that, in w whenever one has teeth problems, one is disposed to judge something one would express with 'I need an optometrist' and vice versa. If this makes sense (I'm not entirely convinced), we might think that my judgement expressed by 'Optometrists are eye doctors' is false in w, when w is considered as actual. So the associated diagonal proposition would be contingent. On the other hand, on Chalmers' view, this proposition has a necessary primary intension because it is true in all epistemically possible scenarios.

¹⁷² As I mentioned above, Stalnaker himself seems to be suspicious of this (see the end of §5).

least a little different to this. Here we don't have to ask what the content of a judgement would've been if it had been made in a different possible world. Instead we ask: is a given epistemic scenario a priori incompatible with the judgement that was actually made? Answering this question is a little complex and requires some idealisation (this is why I mainly presented things in terms of the simpler Stalnaker view). But if we are indeed suspicious about the method from §5, I suggest we could just translate §5 in terms of epistemically possible scenarios. None of the diagonal propositions we discussed were a priori. So this translation should make little difference.

8. Conclusions

In this chapter I have argued that the possible worlds view of propositions, even when combined with two-dimensionalism, cannot meet (SAD) and (IID). This means that they cannot serve AV, given AV's commitment to the aboutness without properties account of singular thought (and its claim that singularity is a property of propositions).

Going forward, we could look at more unstructured propositions views that are broadly within the possible worlds framework. We could look at views within a centred worlds framework (for example, the view in Lewis 1979 and Stalnaker's view in his 2009 book). However, it seems clear a standard centred worlds framework won't help, since this view would only improve matters with respect to indexical or self-locating judgement, which isn't our concern here. ¹⁷³

It is very plausible that it is the lack of structure in possible worlds propositions that is responsible for the problems here. (SAD) and (IID) demand the special fineness of grain given by structure. To further support this, in the next two chapters we'll see that most of these problems—especially regarding (SAD)—evaporate as soon as structure is added to propositions. So my primary conclusion here is that AV is committed to structured propositions.

Suppose that we think that the problem of informative identities should *not* be solved at the level of propositions or content. Then a theory of propositions that can serve AV only needs to meet (SAD). It doesn't need to also meet (IID). Given I've argued AV is

¹⁷³ More complex centred worlds views might help (see, e.g. Ninan 2012, 2013). But these views essentially add a large amount of structure to propositions. At a high level of abstraction from the details, these centred worlds propositions are basically just as structured as Russellian propositions, although everything works a little differently. I'll discuss Ninan's view very briefly at the end of chapter 9.

committed to structured propositions, and given the supposition above, I think it is obvious what account of propositions AV should hold. It should hold a Russellian view of propositions. This is the simplest structured propositions view. The main impediment to holding this view—if we already think propositions must be structured—is that it cannot cope with informative identities. So if we think the problem of informative identities should not be solved at the level of propositions or content, our work is already done at this point: AV should adopt a structured Russellian view of propositions.

The next two chapters will presuppose that the problem of informative identities should be solved at the level of propositions or content. Given this presupposition, I will ultimately argue that AV should adopt something similar to a structured Fregean account of propositions.

Chapter 8: Structured coordinated propositions

1. Introduction

Let's say that a structured proposition is a proposition that, roughly speaking, has a constituent corresponding to each object the proposition is about, and a constituent corresponding to each property, relation or logical operator the proposition concerns. Objects and these abstracta needn't themselves be constituents of the proposition, but if not, there will be at least one constituent corresponding to each of them.

As in chapter 4 (§3), we needn't take this talk of constituency too literally. I don't mean to make a mereological claim when I speak of constituency. Equally when I represent structured propositions with symbolism such as (o, F), I'm not claiming that a proposition is literally an order pair or any kind of set theoretic entity. The minimal commitment of the idea of constituency is that there is a functional dependence between a proposition and its constituents. This gives us a special kind of fineness of grain, because if we have different constituents, or the same constituents in a different arrangement, we always have a different proposition, even if those constituents are co-extensional or necessarily co-extensional. (How much fineness of grain we get will depend on what these constituents are.) As I put it in chapter 4, when I talk of structure and constituency I mean to make a claim about the *individuation* of propositions, not necessarily about the *mereology* of propositions.

Given discussion in the previous chapter, going back to this kind of view is somewhat revelatory. It can seem as if a fog has been lifted. It will be relatively straightforward to distinguish:

- (i) Singular and non-singular necessary propositions (including any singular identity proposition from all other non-singular necessary propositions).
- (ii) The propositions expressed by 'The actual *F* is *G*' and '*o* is *G*' in *w*, even when the actual *F* in *o* is *w*, and even when the former proposition is about *o* in every world.

The point is that these pairs of propositions will have different constituents. The descriptive, non-singular propositions will have more structural complexity. The fineness of grain given by structure is considerably more powerful, for our purposes, than any fineness of grain we can gain by chopping up worlds more finely, by pairing up sets of worlds or even considering whole two-dimensional matrices. This means that it will be fairly easy for a structured propositions view to meet (SAD). The problems from chapter 7 will not arise.

We shouldn't pretend that these advantages don't come at a cost. The sets of worlds views have a neat, simple and elegant way to identify and specify propositions expressed with sentences containing definite descriptions, actuality operators, existential quantifiers, identity symbols etc. On a structured proposition view, things are more complex. We will have to say that propositions contain these entities or things that correspond to them. However, discussion in the previous chapter suggest this complication will be a price worth paying for AV.

In this chapter I am supposing (IID) also needs to be met. AV's theory of propositions needs to cope with informative identities. This prevents AV from adopting the most straightforward version of a structured propositions view. This would be a simple Russellian view, according to which objects, properties and relations are themselves immediate constituents of propositions. There are two salient alternative kinds of account of structured propositions we could consider, in order to cope with informative identities: (a) a Russellian view which has some extra apparatus to help with informative identities; (b) a Fregean view which holds that propositions are structures of senses, some of which correspond to objects that those propositions are about.

I'll consider a view of kind (a) in this chapter. I'll consider some views of kind (b) in chapter 9. I will argue we should prefer Fregean views, at least to the view I'm going to discuss in this chapter.

2. Coordinated propositions

In his 2007 book *Semantic Relationism*, Kit Fine defends a view that takes something like Russellian propositions to be the content of judgement, while also offering an account

of informative identities. I'll call this view *relationism*. It'll take a little bit of work to set up the view.¹⁷⁴

Consider a structured Russellian proposition. We can think of it as an ordered n-tuple. To set up the view we need to name and number the occurrences of objects that are constituents of these propositions. (We won't name the occurrences of properties, relations, or any logical operators that may be constituents of propositions. I'll assume without argument we can make this distinction between objects and non-objects in the next two chapters, although I appreciate it is a little vague.) We'll name these occurrences with $\sigma_1, \sigma_2, \sigma_3...$ Say we have the proposition:

$$\langle o, F \rangle$$

We can say that σ_1 is the first (and only) occurrence of o in this proposition. This is the only occurrence of an object in the proposition. If we have the proposition:

 σ_1 is the first (and only) occurrence of Desdemona in the proposition and σ_2 is the first (and only) occurrence of Cassio in the proposition. Finally consider:

 σ_1 is the first occurrence of Desdemona and σ_2 is the second occurrence of Desdemona.

Now let's define a coordination scheme C for a proposition p. This is an equivalence relation over these occurrences of objects in p, such that:

 σ_m and σ_n are related by C_i only if σ_m and σ_n are occurrences of the same object in p.

Some propositions will have a number of coordination schemes associated with them. Every occurrence of an object will be coordinated with itself and potentially with other occurrences of the same object. Take (Desdemona, loves, Desdemona). There are two schemes for this proposition:

•
$$C_1 = \{\langle \sigma_1, \sigma_1 \rangle, \langle \sigma_2, \sigma_2 \rangle\}$$

¹⁷⁴ My presentation of the view is mostly based on Fine 2007 chapter 2, part F and chapter 3, part B. I skip a few details and fill in a few details myself.

•
$$C_2 = \{\langle \sigma_1, \sigma_1 \rangle, \langle \sigma_2, \sigma_2 \rangle, \langle \sigma_1, \sigma_2 \rangle, \langle \sigma_2, \sigma_1 \rangle\}$$

In C_1 the occurrences of Desdemona are only coordinated with themselves. But in C_2 the first and second occurrences of Desdemona are also coordinated with each other.

Kit Fine's claim is that there are two kinds of proposition. Uncoordinated propositions are just ordinary Russellian propositions. A coordinated proposition is an ordered pair of an uncoordinated proposition and a coordination scheme.

Let p be (Desdemona, loves, Desdemona). This is an uncoordinated proposition. Now suppose that S judges p but S doesn't understand herself to be making a judgement about self-love. For example, perhaps S would express her judgement with 'Desdemona loves n' for some name 'n' that refers to Desdemona, where S doesn't know this. Then on the relationist view the coordinated proposition S judges would be:

$$\langle p, \mathcal{C}_1 \rangle$$

We can describe this as a negatively coordinated proposition, because no occurrence of an object is coordinated with anything other than itself. C_1 doesn't really do anything here.

Now suppose that *S* judges that Desdemona loves *herself*, where *S* would actually express this with 'Desdemona loves herself'. On the relationist view, the proposition that is the object of *S*'s second judgement would be:

$$\langle p, \mathcal{C}_2 \rangle$$

We can describe this as a positively coordinated proposition, because at least two different occurrences are coordinated.

What's the difference between this and the previous proposition? On the face of things, the difference is very thin. In the positively coordinated proposition, p is just paired up with a different equivalence relation over occurrences of Desdemona in p. But on Fine's view, these coordination schemes do represent something important about the content of a subject's judgement—that is to say, what they judge.

Roughly we can say that anyone who judges the second, positively coordinated proposition could not fail to recognise that the proposition concerns the same object twice (or that it is only about one object). As Fine would put it, it is a 'representational requirement' that this positively coordinated proposition is about only one object (2007,

p.72). This coordination is presupposed as part of the content of the judgement. These facts about this kind of coordination—represented by the schemes—are facts about the content of a subject's judgement, ones that Fine thinks are missed by non-relational views of content or semantics. But the same is not true of the first, negatively coordinated proposition. A subject could judge this while failing to recognise that their judgement is only about one object.

I think it's helpful to realise that coordination schemes don't really make it the case that, or explain why, positively coordinated propositions have these coordination properties. In many ways the view here is very thin. Coordination schemes just mark or represent these facts about coordination. I think Fine thinks these facts are just brute semantic facts about propositions.

3. Informative identities

How could this account apply to and help with informative identity judgement and the bee case from chapters 2 and 7? It's quite simple. When I don't realise I have been visited by the same bee twice, the content of my judgment is the proposition:

(A)
$$\langle \langle b, \neq, b \rangle, \mathcal{C}_{-} \rangle$$

where C_{-} is the coordination scheme which only relates the occurrences of b to themselves. In this way C_{-} is like C_{1} above.¹⁷⁵ When I find out that the same bee visited me twice, the content of my judgement is the negatively coordinated proposition:

(B)
$$\langle \langle b, =, b \rangle, C_{-} \rangle$$

But what I knew all along—the content of a trivial judgement of self-identity—is the positively coordinated proposition:

(C)
$$\langle \langle b, =, b \rangle, C_+ \rangle$$

¹⁷⁵ Note that C_1 and C_- cannot be identical because C_1 is a relation over occurrences of particular objects in a different particular proposition. Each σ_1 is the name of a particular occurrence of an object. These two schemes will be structurally identical, however.

where C_+ is the coordination relation which relates the two occurrences of b to each other. (So C_+ is like C_2 above, except that it is over occurrences of b in the proposition $\langle b, =, b \rangle$.)¹⁷⁶

The key to the solution to the problem here is that (B) and (C) are different propositions. So the content of judgement is different in a case of informative identity judgement and trivial identity judgement. Also, on this view, (A) and (C) don't straightforwardly contradict each other. (A) is not just the negation of (C). A rational subject could affirm (A) and (C) at the same time. Also, unlike with the possible worlds view from chapter 7, there's absolutely no problem with saying all these judgements are singularly about b.

What more can we say about the difference between a positively coordinated and negatively coordinated identity judgement? I mentioned above that the view here is alarmingly thin. There seems to be surprisingly little to say in response to this question. Looked at from a certain angle, the view is totally unexplanatory. But there are a few things we can say.

Fine (2007, p.40) says that when two occurrences of an object are coordinated, the object is represented *as the same* across the occurrences. As we might put it, the identity of the objects that occur in the proposition is presupposed by the content of the judgement: that the occurrences are coordinated is an aspect of what a subject judges, when they judge this proposition.

Of course, in a sense all (non-negated) identity judgements represent the constituents of the judgement as the same. But Fine (p.40) makes a distinction between representing *as the same* and representing as *being the same*.¹⁷⁷ The idea is that when a subject entertains a positively coordinated, non-negated identity judgement, they cannot coherently doubt that the identity judgement is true. They cannot coherently doubt that they are thinking of just one object. This is a judgement that could be expressed with 'o is self-identical'. This is representation *as the same*.

¹⁷⁶ We might wonder about the fourth possibility, which would be:

⁽D) $\langle \langle b, \neq, b \rangle, \mathcal{C}_+ \rangle$

Fine doesn't discuss this kind of proposition. But I suppose we would have to say that no rational subject could seriously entertain this judgement.

¹⁷⁷ Cf. the distinction between co-reference *de jure* and co-reference *de facto*, in e.g. Recanati 2012 and Pinillos 2011.

When a subject entertains a negatively coordinated (non-negated) identity judgement, their judgement also represents that the objects are the same, i.e. that there is only one object. But in this case, this is something that a rational subject could coherently doubt. It's also something that a subject could discover or find out. As we might put it, the identity is *asserted* but not *presupposed* by the content of the judgement. Hence the identity judgement is potentially informative. This is mere representation *as being* the same.

As in §2, C_- and C_+ don't really explain *why* or make it the case that (B) is informative while (C) is not. They just mark primitive or brute semantic facts about coordination, which in turn account for the epistemic facts about informativeness and the possibility of doubt.

Whether or not this counts as a satisfying account of informative identity judgements, that can be adopted by AV, will depend on our explanatory ambitions and our tastes. After all, I have argued that the account of informative identity judgement offered by Fine's relationism is very explanatorily thin. However, next I will argue the relationist account of a similar phenomenon to informative identity judgement reveals that it is looking in the wrong place in its account of *representation as the same*. So AV should look elsewhere for an account of informative identities that can meet (IID).

4. Trading on identity

Fine's relationism is also supposed to solve a puzzle that is somewhat similar to, but also importantly different to, the puzzle related to individual informative identity judgements. This other puzzle sometimes seems to be the main puzzle that Fine himself is interested in.

I'll reuse the bee example. Recall that ' bee_T ' is the name I coin for the bee that visited me today. ' bee_Y ' is the name I coin for the bee that visited me yesterday. It turns out that, surprisingly, $bee_Y = bee_T$, but I don't realise this immediately.

Consider the following two inferences:¹⁷⁸

 $^{^{178}}$ The conclusions of these inferences are often given as an existentially quantified sentence 'Something is both F and G' (see e.g. Campbell 1987, Recanati 2012). In some ways this makes the examples simpler to discuss, because it doesn't require us to also discuss coordination between the premises of the argument and its conclusion. For me it'll be simpler to have a name in the conclusion, so that we don't have to take a stand on the precise content of existential judgement on this structured propositions view.

- (1) bee_T is F
- (2) bee_Y is G

(2) 1 1 1 1 1 1

- (3) bee_T is both F and G
- (1') bee_T is F
- (2') bee_T is G

(3) bee_T is both F and G

Why is the second inference valid without an identity premise while the first is not? One obvious answer is: because of the identity and conjunction rules in our natural deduction systems. But let's switch the question and ask about the corresponding judgements, rather than about the sentences.

We can ask: Why is the second inference rational and automatic without an identity premise, while the second inference is not? Note that the Russellian propositions corresponding to (1) and (1'), and (2) and (2'), are identical. So if we hold this kind of view of propositions, how can inference (1)-(3) require an identity premise while inference (1')-(3) does not?

Perhaps we need a trivial identity premise in the second inference after all. So maybe we need:

- (1') bee_T is F
- (2') bee_T is G
- $(=) bee_T = bee_T$

(3) bee_T is both F and G

But if there was a difficulty with (1')-(3) before we added (=), adding it won't help.

To see why, let's borrow a phrase from John Campbell (1987). We can say the puzzle is to explain how we can 'trade on the identity' of the object referred to by the occurrence of ' bee_T ' in (1') and the object referred to by the occurrence of ' bee_T ' in (2'), in order to reach (3). But (=) can help with this only if we can trade on the identity of the object referred to

by the occurrence of ' bee_T ' in (1') and the object referred to by one of the occurrences of ' bee_T ' in (=). So adding (=) really doesn't help.

It seems we don't have the resources to explain the difference between these two inferences (in judgement) on a pure Russellian view of propositions. We might think relationism or coordination could help. But it seems clear *individual* coordinated propositions won't help us here. The propositions corresponding to our premises—except (=)—each contain only one occurrence of the bee, so coordination schemes (of the kind in §2 and §3) won't do anything here.

To try to solve this puzzle Fine also defines coordination schemes over *sequences* of propositions (2007, pp.55-57). Let P be a sequence of propositions $p_1, p_2, ..., p_n$. We can name and number all the occurrences of objects in this sequence, as in §2. And we can define a coordination scheme C over these occurrences, as above. We can call the ordered pair $\langle P, C \rangle$ a *coordinated sequence* of propositions.

Let's consider this sequence of propositions, which will correspond to the two premises in both arguments above:¹⁷⁹

$$P_1$$
: $\langle b, F \rangle, \langle b, G \rangle$

Also consider two coordination schemes defined over this sequence. \mathcal{C}^1_+ coordinates both occurrences of b with each other and themselves. \mathcal{C}^1_- only coordinates each occurrence of b with itself. We can represent the judgements involved in the second inference—(1') to (3)—with the following coordinated sequence:

$$\langle P_1, \mathcal{C}^1_+ \rangle$$
.

And we can represent the judgements in the first inference—(1) to (3)—with:

$$\langle P_1, \mathcal{C}^1_- \rangle$$
.

As in §2, the idea is that a subject who judges the positively coordinated sequence could not fail to recognise that they are judging about the same bee twice. This is presupposed as part of the content of their judgement. Hence there is no need for an identity premise. The subject who judges the negatively coordinated sequence could fail to recognise they are

¹⁷⁹ As above, we'll say b is the referent of 'bee_T' and 'bee_Y'.

judging about the same bee twice. Hence the need for an identity judgement, or at least an implicit one.

5. A problem with coordinated sequences

This is pretty neat. But I'll argue there is a problem lurking in this account of trading on identity. This problem undermines the relationist account of informative identities.

Let's start with the question: What does it mean to judge a sequence of propositions? In a sense this notion could be straightforward. One judges the sequence of propositions P when one judges the propositions p_1, \ldots, p_n individually, in sequence. But this can't quite be what Fine means. When we make individual judgements with the propositions $\langle b, F \rangle$ and $\langle b, G \rangle$ as contents, coordination schemes could play no role, even if we added them. There's nothing to coordinate within these individual propositions, since no object occurs twice in them. So judging a sequence of propositions must be something more than just judging some propositions, in sequence.

Equally the view cannot be that when I make the judgement corresponding to (1') the object of my judgement is:

$$\langle\langle b, F \rangle, \mathcal{C}^1_+ \rangle$$

where (recall) C_+^1 is the positive coordination scheme for the *sequence* P_1 . If this were the view, it would be part of the content of my judgement, when I judge 'bee_T is F', that the bee is the same as the bee that one of my future judgements is (well be?) about. But this is extremely odd! C_+^1 makes no difference to the proposition $\langle b, F \rangle$ and it makes reference to occurrences of objects in another proposition (namely, $\langle b, G \rangle$). This could make it seem as if, when I make the judgement corresponding to (1'), it is already predetermined that I would also make the judgement corresponding to (2'). Maybe talk of predetermination is a little too strong. But note I don't even need to have the *capacity* to make the judgement corresponding to (2') when I make the judgement corresponding to (1'). For example, I could make the judgement corresponding to (1') without the capacity to entertain propositions involving the property G. Later I could gain this capacity and make the judgement corresponding to (2'). Surely in some circumstances I could then trade on the identity of b and move to the judgement corresponding to (3). Given this it would be

extremely odd if part of the content of my first judgement made reference to occurrences of objects in the content of my second judgement.

So coordination only plays a role when we consider these propositions as a coordinated *sequence*. And since coordination is a semantic phenomenon (a feature of *content*), if the view is to work, it must be that a coordinated sequence of propositions is, in some sense, literally a content of judgement. But we can ask: what exactly does this mean?

To bring out how strange and unsatisfying this view ultimately is, it will be helpful for us to label the times at which the judgements in our two inferences occur. Let's say the first premise is judged at t_1 , the second premise is judged at t_2 and the conclusion is judged at t_3 . Let's focus on the second inference, (1')-(3), in which trading on identity is licensed.

Fine's view cannot be that when a subject makes this inference, that subject judges the coordinated sequence of propositions $\langle P_1, \mathcal{C}_+^1 \rangle$ at t_1 . To see this, imagine a case in which a subject doesn't have the capacity to entertain propositions involving the property G at t_1 . Rather they gain this capacity fractionally before t_2 . In this case the subject cannot, at t_1 , judge a sequence of propositions that contains a proposition involving the property G. So we can't say that, at t_1 , this subject judges the sequence of propositions $\langle P_1, \mathcal{C}_+^1 \rangle$. After all, at t_1 they don't yet have the capacity to entertain one of the propositions in this sequence. Given this, two questions arise:

- What exactly does the subject judge at t_1 ?
- When does the subject judge the coordinated sequence of propositions that explains why trading on identity is rational, if not at t_1 ?

We can find some answers to these questions in the following passage:

[W]e should now distinguish between the collective and the individual content of someone's beliefs. If asked what someone believes, then it would normally be thought sufficient to respond by listing the various propositions that he believes. But this view can no longer be sustained. For suppose that someone believes that [bee_T is F] and also believes that [bee_T is G]. Then what he believes is the proposition that [bee_T is F] and the proposition that [bee_T is G]. But suppose now that he believes that [bee_T is F] and also believes that [bee_T is G]. Then the individual content of his two beliefs is as before: the proposition that [bee_T is F]; and the proposition that [bee_T] (i.e. [bee_T]) is [G]. But there is a difference in the coordinated content of the two beliefs; for, in the one case, the beliefs are positively coordinated while, in the other case, they are not. Thus the

coordinated content of his beliefs, taken collectively, is not exhausted, or even determined, by the content of his beliefs, taken individually. (2007, p.77)¹⁸⁰

It appears the view here is that, at t_1 the subject judges an uncoordinated proposition of the form $\langle b, F \rangle$. And at t_2 the subject judges an uncoordinated proposition of the form $\langle b, G \rangle$. In virtue of making these two judgements, the subject counts as having judged the coordinated sequence $\langle P_1, C_+^1 \rangle$. Presumably the subject counts as having judged the coordinated sequence at t_2 or shortly after. And having judged this coordinated sequence is what licenses them to infer that bee_T is both F and G at t_3 . In the terms used in the previous section, the picture is that the judgements made at t_1 and t_2 represent b as the same, due to the coordinated sequence. No rational person could coherently doubt that the two judgements concern only one bee. And this is what licenses the subject to reach the conclusion of the inference. This picture of trading on identity asks us to accept quite a lot more than the relationist solution to the problem of individual informative identities did. It doesn't just require us to accept that semantic facts about coordination are an aspect of the content of individual judgements. Rather it requires us to accept a new kind of content. In the passage quoted above Fine calls this *collective content*.

Let's contrast two cases. In case 1, the subject makes the inference corresponding to (1')-(3) and trading on identity is licensed. Here's what goes on in this case:

Case 1

• At t_1 : the subject judges $\langle b, F \rangle$

• At t_2 : the subject judges $\langle b, G \rangle$

• At or after t_2 : the subject counts as having judged the positively coordinated sequence $\langle P_1, C_+^1 \rangle$, which we can represent with:¹⁸¹

$$\langle \langle b, F \rangle, \langle b, G \rangle, C^1_+ \rangle$$

• At t_3 : the subject is rationally licensed to infer: b is both F and G.

In contrast, when the subject makes the inference corresponding to (1)-(3), where trading on identity isn't licensed, what happens is this:

-

¹⁸⁰ I've changed the example to match my own.

The lines here represent which occurrences of b are coordinated with each other by the coordination scheme. (Every occurrence of b will also be coordinated with itself.)

Case 2

- At t_1 : the subject judges $\langle b, F \rangle$
- At t_2 : the subject judges $\langle b, G \rangle$
- At or after t_2 : the subject counts as having judged the negatively coordinated sequence $\langle P_1, C_-^1 \rangle$, which we can represent with:

$$\langle \langle b, F \rangle, \langle b, G \rangle, C_{-}^{1} \rangle$$

• At t_3 : the subject is not rationally licensed to infer: b is both F and G.

The collective contents here are represented by the positively coordinated sequence in case 1 and the negatively coordinated sequence in case 2. Fine says this collective content is not determined by the content of the individual judgements that make up the collective or collection of judgements. So we can ask: What *does* determine collective content in these cases? I don't think the relationist has any good answer to this question.

To see this, let's focus on the individual judgements made at t_1 and t_2 in each case. The crucial point is that these are the same across case 1 and case 2, but trading on identity is licensed in case 1 and not in case 2. This raises the following questions:

- In virtue of what is b represented as the same in the judgements made at t₁ and t₂ in case 1, such that trading on identity is licensed?
- Why do the pair of judgements in case 1 determine the collective content given by the positively coordinated sequence?

The relationist owes us answers to these questions. But it has nothing to say in response. After all, the very same individual judgements are made at t_1 and t_2 in case 2, where b is not represented as the same and where trading on identity is not licensed. There's nothing we can point to about the individual judgements made at t_1 and t_2 in case 1 that explains or accounts for the fact that they represent b as the same. On the view it's just a brute fact that the pair of judgements together determine a positively coordinated collective content and thus represent b as the same. And there's nothing about the individual judgements that makes this the case. Or if there is something, it's not something that the relationist has anything to say about. For this reason, there is an explanatory hole in Fine's account of trading on identity, which goes beyond the thinness of his account of informative identity

judgements. And there's nothing that could fill this gap, given the resources available to the relationist.

However, there is something very natural we could say about case 1, something that Fine himself does not want to say. This would fill the gap above. One natural thing to say is that the individual judgements made at t_1 and t_2 in case 1 represent b as the same because they represent b in the same way. This would account for why, together, they determine a positively coordinated collective content. This account or explanation will only be satisfying if we say a bit more about what it is to represent an object in a particular way. This seems like a promising way to plug the hole in Fine's account.

If we go down this route, then Fine's relationist account of trading on identity will be deficient and incomplete. If we go down this route, then there will be semantic facts about (or facts about the content of) the individual judgements made at t_1 and t_2 , in case 1, which the relationist hasn't accounted for: namely the *way* in which *b* is represented in these judgements.

If this is right, then Fine's account is missing something. We shouldn't say, as he does, that the content of the individual judgements made at t_1 and t_2 are the same in cases 1 and 2. Instead, in case 1, the individual judgements made at t_1 and t_2 represent b in the same way and in case 2 the individual judgements made at t_1 and t_2 don't represent b in the same way. And this will be something that our theory of content will need to account for.

There is a hole or a gap in Fine's account of trading on identity, which is a key puzzle the relationist view is supposed to solve. The problem is supposed to be solved by his notion of collective content or of coordinated sequences of propositions. But it is extremely unclear how this content is determined. There may be several ways to plug this hole or gap. But one natural suggestion is that we appeal to the *way* in which objects are represented in propositions. This points towards a view that is different to Fine's own. On this new view we should leave coordination schemes and relationism aside and instead try to give a fuller account of how judgements can represent an object in the same way or a

have argued is very explanatorily thin.

¹⁸² Fine rejects this account because he doesn't think it is possible to say anything satisfying about what it is to represent an object in a particular way (2007, p.35ff; p.42). I will try to say something more satisfying about this in the next chapter, although I will tentatively recommend that we could take the notion of a *way of thinking* or a *mode of presentation* as primitive. Even if we take this notion of sense to be primitive, it's not obvious to me that this kind of Fregean view is any less satisfying or explanatory than Fine's view, which I

different way. This points towards a broadly Fregean view of propositional content, which I will discuss in the next chapter. Also, if we ultimately want to deal with trading on identity by giving some account of the *way* in which an object is represented in a judgement, then we will want to account for individual informative identities in a similar way. So, I suggest, the failure of the relationist account of trading on identity also undermines its account of individual informative identity judgements, which I discussed in §3.

6. Conclusions

I conclude that AV should not accept the relationist account of propositions. Although I didn't find anything particularly wrong in itself with the relationist account of individual, informative identity judgements (which is all that is strictly-speaking required in order to meet (IID)), discussion of trading on identity reveals that the relationist account of representation as the same is puzzling and deficient. The relationist cannot give a good account of representation as the same across two different propositions, which is surely something we should want to be able to do. This reveals that there is something puzzling and deficient about understanding representation as the same in terms of coordination and coordination schemes.

Instead, I suggested we could understand representation as the same in terms of representation *in the same way*. This could allow us to account, in a uniform way, for representation as the same within one individual proposition *and* across different propositions. I will discuss these ideas in more detail in the next chapter.

There's one more important lesson I want to extract from this chapter. I suggested in \$1 that the relationalist view could easily meet (SAD) from chapter 6. Essentially the view says that propositions are simple Russellian structured propositions. The addition of coordination schemes doesn't make any difference to the truth-conditions or the aboutness facts of propositions. So meeting (SAD) is straightforward for the relationist.

The key lesson here is that, in so far as we made progress from the possible worlds view of propositions from chapter 7, it was the move to structured propositions that made the difference here. Why exactly has structure helped so much?

With respect to (SAD) this is straightforward. On AV's understanding of singular judgment, all non-singular judgements about objects are basically descriptive judgements. This means that non-singular judgements have a different structure to singular

judgements (generally they have more structure). If our propositions can reflect this structure, then it is easy to distinguish singular and non-singular judgement.

What about identity judgements? We made at least some progress here. What helped us was that we considered identity judgements as having structured contents, which present the object the identity judgement is about *twice*. We then have a fairly straightforward option to account for the difference between informative and non-informative identity judgements. We can account for this in terms of the relationship between the two presentations of the object. In the case of trivial identity judgements, the object can be, somehow, presented as the same or in the same way in both presentations. In the case of informative identity judgements the object can be presented differently across the two presentations.

In the next chapter I will discuss a view that preserves these advantages from structured propositions, but which provides an account of representation as the same that is preferable to Fine's. It should be no surprise that this will be a Fregean view of propositions.

Chapter 9: Structured Fregean propositions

1. Introduction

Let's recap where we are. In part two of this thesis, I am exploring the consequences of adopting AV. In particular, I am exploring what account of propositions must be adopted by AV. This account of propositions must meet the following desideratum:

Singular Aboutness Desideratum (SAD) The theory of propositions must be compatible with the aboutness without properties account of singular thought from chapter 4. It must be able to give an account of propositions that accords with this.

In chapter 7 I argued that only structured propositions can meet (SAD). On an unstructured propositions view, a paradigmatically singular proposition and a paradigmatically non-singular proposition can end up as identical propositions. I said that a Russellian view of propositions—which, for example, is the basis of Fine's view—can meet (SAD).

If we want to deal with informative identities at the level of propositional content, then AV's account of propositions must also meet the following desideratum:

Informative Identity Desideratum (IID) The theory of propositions must be able to deal with singular, informative identity judgements. It must not entail that informative and trivial identity judgements have the same propositional content. And it must not entail that all informative identity judgements are partially descriptive.

I've said that problems related to informative identities are particularly tricky and saliant for an acquaintance view like AV, because AV must eschew all descriptivist solutions to these problems. This is because AV holds that all instances of singular aboutness are instances of non-descriptive aboutness and AV also thinks it really matters whether or not a given judgement is singular or non-singular. A simple Russellian view of propositions cannot meet (IID). In the previous chapter I argued that Fine's relationist view cannot meet (IID) in a satisfactory way. In this chapter I will argue that AV can adopt

a Fregean view of propositions in order to meet both (SAD) and (IID). That the Fregean view is a promising candidate is hardly surprising. After all, as we all know, Frege's general view of semantic content was partly motivated by a recognition of the kind of identity puzzles mentioned in (IID). Also, Fregean propositions are structured. I've argued this helps a lot with (SAD).

One reason why a Fregean view might not seem promising for AV is that the cornerstone of the view is the notion of sense. Senses are sometimes thought to be descriptive, or at least non-singular, so unlikely to be of use to someone who wants to explain identity puzzles regarding *singular* propositions and thus meet (IID).

Against this I will trace two different views on which genuinely singular propositions can be composed of senses. I will argue that both these views—what I call the *sense-token* view and the *primitive sense* view—can meet both (SAD) and (IID). Either view can serve AV.

A point I will argue for in this chapter is that, in some ways, senses don't really give us more resources to deal with identities than we had in chapter 7. It will turn out that, at least on one understanding, Fregean propositions are roughly similar to the diagonal propositions from chapter 7, in some complex ways. Rather it's specifically the *structure* afforded to us by Fregean propositions that really makes the difference and makes this a promising theory of propositions for AV.

In addition, I will demonstrate that a Fregean propositions view is preferable to Fine's structured, coordinated propositions view. In particular the Fregean view gives a better account of what Fine calls 'representation as the same'. In short, representation as the same will be understood in terms of sameness of sense. The key advantage to the Fregean view is that sameness of sense can give a uniform account of both representation as the same within one proposition *and* across different propositions. This is preferable to and less mysterious than Fine's appeal to coordinated sequences of propositions and to collective content, when he tries to account for representation as the same across different propositions.

2. Introducing senses

In this section I'll lay out the barebones of the Fregean view of propositions. One key preliminary note: I am concerned with Fregean propositions as contents of judgement and of thought. But Frege's own view was mostly driven by the semantics of expressions and sentences. I'll ignore these aspects of the view when it's not relevant for our purposes. (In general, I won't aim for historical accuracy in this chapter.)¹⁸³

The core of the view is that propositions are composed of senses. Senses are abstract objects of some sort. They are repeatable and (in principle) accessible to all thinkers. Each sense corresponds to at most one item. This item can be an object, a property, a relation, a logical operator etc. We can call the items corresponding to each sense that sense's *reference*. These items can be the reference of multiple different senses. So we say that sense determines reference, but not vice versa. Here I'll be mostly concerned with senses that have *objects* as their reference (rather than properties, relations, or logical apparatus).

Propositions are themselves senses, on the Fregean view. (Frege would call propositions *thoughts.*) A proposition is the sense of the sentence that expresses the proposition. The reference of a proposition is a truth-value. In general, the view is compositional. The sense of a complex expression (e.g. a sentence) is determined by the sense of its parts. This means that, if two complex senses (e.g. two propositions) are composed of all the same simpler senses, arranged in the same way, then the two complex senses are the same. And if we have two different complex senses, then they must be composed of different simpler senses, or of the same simpler senses arranged in a different way. Reference is also compositional in this way. The reference of a complex expression (e.g. a sentence) is determined by the reference of its parts (e.g. the reference of the expressions that make up the sentence). ¹⁸⁴

There's one more crucial feature of senses. They are individuated by cognitive significance. If it is possible for a rational subject, at a time, to take two different, contrary attitudes towards propositions s and s', then $s \neq s'$. Given the compositionality of sense, if $s \neq s'$ then they are composed of different senses, or the same senses, arranged differently.

This notion of cognitive significance is a little hard to understand precisely. Some (e.g. Chalmers 2002) understand this in terms of a priority. 185 On this view, if proposition s and

192

-

¹⁸³ For a historical account of Frege's theory of judgement, see e.g., Bell 1979, 1990. The most relevant primary sources here would be Frege 1892 and 1918-19.

¹⁸⁴ At the level of reference, the basic picture is that singular terms refer to objects. Other terms refer to functions of some sort (what Frege would call 'concepts'). In well-formed sentences, these functions and objects combine (two at a time) to determine a truth-value, which is the reference of the sentence. For a helpful summary of the general approach, see chapter 1 of Heim and Kratzer 1998.

¹⁸⁵ We saw this, in different terms, in chapter 7, §7.

s' have different cognitive significance, then they are not a priori equivalent. But this does not fully capture the notion of cognitive significance. A rational subject could fail to realise that $11^3 = 1331$. They could be incapable of working this out. So they could take different attitudes towards the proposition expressed by ' 11^3 ' is a boring number' and '1331' is a boring number'. (This would suggest that the two propositions are composed of two different senses which have 1331 as their reference.) But surely these two propositions are a priori equivalent. So cognitive significance and a priori non-equivalence are a little different. Frege himself certainly seemed to think this: his view is partly designed to account for informative identities in mathematical contexts.

To summarise these features of senses:187

- (S1) Propositions are composed of senses.
- (S2) Propositions are themselves complex senses.
- (S3) Each sense determines at most one reference.
- (S4) One reference can be determined by multiple senses. 188
- (S5) Complex senses are determined by the senses that compose them.
- (S6) Senses are individuated by cognitive significance.

What more can we say about what senses are, how they are individuated and how they have the features described by (S1)-(S6)?

There is disagreement amongst Fregeans about what more we should say about senses. I guess there is fairly broad agreement that senses are a *mode of presentation* or *a way of thinking* of their reference. But it's unclear what these claims or metaphors really come down to. I'm going to suggest we have two broad options for understanding Fregean senses in more detail. On one option we try to give an informative account of what senses are, and how they can play their roles described by (S1)-(S6) above. The other option is that

¹⁸⁷ There are other roles or features that are only relevant to language and semantic theorising. For example, in indirect contexts expressions refer to their customary senses. I won't discuss these here.

¹⁸⁶ Chalmers recognises that his account is revisionary of Frege's own view (2002, p.155).

¹⁸⁸ We shouldn't read this as demanding that it's impossible for a reference to be determined by only one sense. We can remain neutral about this here.

¹⁸⁹ Although see many of the essays in Sainsbury 2002 for a different view. Also see §9 below.

we take senses to be primitive. We stop at saying that senses are a mode of presentation or a way of thinking of their reference and that senses have the features (S1)-(S6) above. 190

These two options have differing levels of explanatory ambition. For our purposes, I'm going to suggest we could choose either view. In the next three sections I'll discuss the details of a recent account that tries to give some informative account of what sense is and which is specifically concerned with senses as constituents of thought. I'll focus here on Christopher Peacocke's account.¹⁹¹ In §6 I'll return to a view on which senses are primitive.

3. Peacocke's fundamental rules of reference

Christopher Peacocke (2008) holds that senses are individuated by an account of what determines their reference. ¹⁹² He calls these *fundamental rules of reference*. (They are fundamental because any other account of what determines the reference of a given sense can be explained in terms of the fundamental rule.)

Peacocke also holds that when we make a judgement that contains a given sense s, we are subject to certain rational norms or rational requirements on what inferences we are entitled to make involving s (2008: 58-61ff.) We can think of these as related to the introduction and elimination rules for s. Only in certain situations is one rationally entitled to make a judgement containing s. And there is a limited range of further judgements one can make on the basis of a judgement containing s. The fundamental rule of reference for a sense is supposed to explain and account for these rational norms and requirements (2008, chapter 2). The purpose of these points about norms and rational requirements is

¹⁹⁰ This primitive view could be related to or motivated by the idea that we cannot really say or explain what a sense is. At best we can *show* or *display* a sense, by presenting its reference in a particular way. See e.g. Dummett 1973, p.227; McDowell 1977; Evans 1982 p.35ff., 1985. Cf. Speaks 2013. These authors make these points in discussing senses specifically as part of linguistic theories of meaning. How this could be applied to senses as constituents of thought isn't entirely obvious to me. For a very recent attempt to give a minimal Fregean view, see Gray 2022.

¹⁹¹ Another salient account would be Gareth Evans'. I choose Peacocke partly because he gives the most recent full account (2008). Evans' account isn't set out in much detail in his 1985 paper 'Understanding Demonstratives'. And it's challenging for us to extract a concise account from his posthumous 1982 book *The Varieties of Reference*. Partly this is because his view is interwoven with some assumptions and principles that are similar but subtly different to those I've said should be accepted by AV. Peacocke's wider commitments are more alien to our concerns here, so it's easier to pass over them quietly. I'll mainly present Peacocke's view here. The differences between the views won't matter too much for our purposes.

¹⁹² Peacocke calls senses 'concepts' in his 1992 and 2008. It seems clear that concepts are supposed to be senses. They are supposed to be constituents of content of judgement rather than vehicles of judgement. In older work he called them 'modes of presentation' (1981, 1983).

to tie together senses, reference rules, rationality and cognitive significance. They are supposed to substantiate feature (S6) above.

Here are some examples of fundamental rules of reference:

What makes a time the reference of *now* in a thinking is that it is the time at which the thinking occurs.

What makes someone the reference of the first-person concept *I* in a thinking is that he or she is the thinker (the producer of that thinking).

What makes something the reference of a particular perceptual demonstrative *that cup*, where the perceptual demonstrative is individuated by a particular way W in which something is given in a thinker's percept, is that: it is the cup thereby perceived in way W by the thinker. (2008, p.56)

One more example, given in a slightly different form:

[T]he fundamental reference rule [for conjunction is] that a conjunction is true iff both its constituents are true (2008, p.73)

Peacocke holds that thinkers who are able to make judgements containing a given sense *s* must have an implicit or tacit understanding of the fundamental reference rule for *s*. (We need not require that the subject is capable of formulating or entertaining the reference rule.) This is where we can connect things back up with cognitive significance. Consider two propositions:

$$p: \langle s_1, s_2 \rangle$$

$$p^*$$
: $\langle s_1, s_3 \rangle$

Suppose $s_2 \neq s_3$. Therefore s_2 and s_3 have different fundamental reference rules. This is supposed to explain why it's possible for a rational subject S to take different attitudes towards p and p^* . S has an implicit grasp of these different fundamental reference rules. So, as we might put it, it's conceivable for S that the two senses have two different references. So S can take different attitudes towards the two propositions at one time. There are more details we could fill in, but this sketch will do for now.

For what it's worth, Gareth Evans doesn't share all of Peacocke's assumptions or commitments. But all this echoes and maybe explains something he says in 'Understanding Demonstratives':

If the account of what makes a subject's thought T_1 (about x to the effect that it is F) about x is different from the account of what makes his thought T_2 (about x to the effect that it is F) about x, it is possible for the subject coherently to take, at one and the same time, different epistemic attitudes towards the thoughts he entertains in T_1 and in T_2 .(1985, p.301).

Peacocke's view is complex and is part of an extremely broad book-length project that I can't hope to do justice to here. But we don't need to buy into all of his commitments to appreciate or understand the basic shape of the account. He summarises this as follows:

The [...] Fregean view is that the essence of a [sense] is given by the fundamental condition for something to be its reference. The fundamental condition for something to be the reference of the [sense] is what makes the [sense] the [sense] it is (2008, p.55).¹⁹³

This is broadly commensurate to the shape of Evan's view, especially as presented in 'Understanding Demonstratives' (1985).

Fundamental reference rules are easiest to give for senses with logical and mathematical referents, or for indexical senses. Most of Peacocke's examples are of this kind. Logical and mathematical expressions have fairly clear definitions. The only difficulty will be, in some cases, choosing which definition is fundamental. Indexical fundamental reference rules can be given by a description related to their Kaplanian character. It's usually fairly obvious what these are.

But what about the fundamental reference rules for other kinds of senses, for example senses that are constituents of propositions expressed by names or demonstratives? We saw above Peacocke's fundamental reference rule for a perceptual demonstrative sense. But this rule seems to be less clearly correct, and generally less clear, than the other examples I discussed. Peacocke does discuss the sense of the name 'Hesperus' and 'Phosphorus', but only gestures towards the relevant rules:

The fundamental reference rule for the former mentions the heavenly body to appear first in the evening. The fundamental reference rule for the latter mentions the last heavenly body to appear in the morning. (2008, p.60)

¹⁹³ I've swapped 'concept' for 'sense'. Peacocke does think that concepts are senses and that these are constituents of propositions. That is to say, Peacocke doesn't take the vehicles-based approach discussed in chapter 6, \$2, despite his use of the term 'concept' for senses. In his 2008 he sometimes seems to use 'sense' and 'concept' interchangeably, e.g. pp.87-88, which I quote in \$5 below.

This is hardly a full characterisation of the fundamental reference rules. It might be hard to understand what the full fundamental reference rules could be. We might worry that they are basically just descriptions.

At a certain level of abstraction from the details of Peacocke's account, I think we've already encountered the basic idea behind fundamental reference rules in chapter 7. This might help us understand what they are. Recall when we constructed two-dimensional propositional concept matrices (chapter 7, §5). To work out which object a judgement would've been about when we went down the rows of the matrix we asked, 'What judgement would subject *S* have made in these circumstances (and what would it have been about), if we consider *w* as actual?' for various different worlds *w*. We carefully controlled what we varied about these worlds, usually only swapping the identity of objects. I suggested that we work out which object a judgement would be about in *w* by considering which object, in *w*, fulfils the *role* played by the object subject *S* actually thought about. This method is a bit imprecise and vague. But I think it's plausible to say we were implicitly employing something like a fundamental reference rule to work this out. For example, I think we really worked out which object plays the Hesperus role in a possible world (considered as actual) by considering what object is determined, in that world, by the fundamental reference rule for the sense expressed by 'Hesperus'.

We can understand fundamental rules of reference in this kind of way. If we don't think of them in this kind of way, then it will be unclear what the fundamental reference rules associated with non-indexical singular terms could be. And it will be unclear that talk of senses being individuated by fundamental rules of reference adds much beyond the vague metaphor that senses are a mode of presentation or way of thinking of their referents.

If that's right then, at this level of abstraction, there is a connection between propositions composed of Peacockean senses and diagonal propositions from chapter 7. To bring this out further, we will have to consider Peacocke's Fregean propositions relative to worlds. This wasn't really something Frege himself was at all concerned with or something that Peacocke is particularly concerned with.¹⁹⁴

¹⁹⁴ Peacocke is actually most directly concerned with indexical fundamental rules of reference in his 2008. So he most often considers them relative to different *contexts* (e.g. times, places, thinkers), not different worlds.

There are two broad options for understanding Fregean propositions, if we think senses are individuated by fundamental rules of reference.

- 1. Propositions are composed of senses, where senses are individuated by fundamental reference rules.
- 2. Sense-types are individuated by fundamental reference rules. Propositions are composed of sense-tokens. Sense-tokens can be understood as an ordered pair of a sense-type and its reference.

I'll discuss these two options in the next two sections.

4. Propositions composed of Peacockean senses

One way to understand Fregean propositions, given Peacocke's account of sense, is to say propositions themselves are composed of senses that are individuated by their fundamental reference rules.¹⁹⁵ When we consider a proposition relative to a world, the fundamental reference rules determine the reference of the senses that compose the proposition, in that world. Suppose we have:

$$p_1$$
: $\langle s_1, s_2 \rangle$

If we consider p_1 relative to world w, then the reference rules for s_1 and s_2 will determine a reference for them in w. ¹⁹⁶ For example, s_1 could determine an object as its reference and s_2 could determine a property as its reference. We can then determine a truth-value for p_1 in w: p_1 is true in w just in case the reference of s_1 satisfies the reference of s_2 in w.

Is p_1 a singular proposition? To start answering this we can ask: Can the reference of s_1 be the same object in every world or context? We've already seen that in some cases, yes. The sense that is individuated by the conjunction reference rule clearly has the same reference in every world. But what about senses for ordinary objects, which would be expressed by singular terms?

¹⁹⁵ Peacocke himself seems to hold the kind of view discussed in the next section, rather than this view. All this involves a bit of extrapolation because it is not part of Peacocke's project to give an account of propositions.

¹⁹⁶ To deal with indexical senses we will probably have to specify a subject, a time and maybe a place. Perhaps we could use centred worlds.

It seems that the fundamental reference rules we've seen will determine different references in different worlds or contexts. The rule for the first-person concept will determine a different reference for different thinkers. The rule for perceptual demonstratives given above isn't especially clear, but I think it could determine different objects in different worlds or contexts. I think we can say the same for most other senses expressed by singular terms. For example, it seems as if Peacocke's incomplete gloss of a fundamental rule of reference for 'Hesperus' would, even if filled-out a bit more, determine different objects in different worlds. If we think of fundamental rules of reference in terms of the *roles* we used in our two-dimensional matrices, as suggested in §3 above, then fundamental rules of reference will determine different objects, as their reference, in different worlds, at least for ordinary, contingent objects.

This means that these propositions, composed of senses individuated by fundamental reference rules, will not be singularly about ordinary objects. They will fail to satisfy necessary aboutness. I've argued this is a necessary condition for singular aboutness. At a certain level of abstraction from Peacocke's account, these propositions are structured versions of the diagonal propositions (or primary intensions) from chapter 7. They are about whatever object plays a certain role in a world. Even if these fundamental reference rules aren't just descriptions, senses individuated by them are ultimately non-singular. If this is how we understand Fregean propositions, then the view is of no use to AV. It will fail to meet (SAD), because there will be no propositions that are singularly about ordinary, contingent objects.

To bring this out further, let's consider an example. Consider a simple judgement made in the presence of acquaintance with an object in w, one that could be expressed by 'Hesperus is bright'. In at least some circumstances, AV will want to say this can be a singular judgement, that satisfies necessary aboutness and aboutness without properties. But on the view of propositions discussed in this section, the proposition judged in w will be:

$$p_1$$
: $\langle s_1, s_2 \rangle$

where s_1 is a sense that has Hesperus as its reference in w and s_2 is a sense that has the property brightness as its reference in w. These two senses will be individuated by fundamental reference rules. Now it may not be entirely clear what the fundamental reference rule associated with s_1 is. But in section 3 I suggested we can think of it as a

description of the role that Hesperus plays in w, such that it is the object the subject thinks about in w. And on the version of the view we're considering in this subsection, the reference of s_1 can vary from world to world. Different objects can play the Hesperus role in different worlds. This means that p_1 will fail to satisfy necessary aboutness for much the same reason that the diagonal propositions from chapter 7 did. So it won't be a singular proposition.

Note that there may be something quite un-Fregean about this view. Usually we think of senses as a mode of presentation of a particular object. So each sense determines at most one object (or property, or whatever) as its reference. But here a single sense can determine different references, albeit in different worlds. Now Frege himself wasn't concerned with the behaviour of senses across different possible worlds, so maybe it's not obvious whether this view is in the spirit of Frege's view. In any case, this doesn't matter much to us, since we've established this version of the view is not useful for AV.

I suppose we could hold a view on which senses (that have an ordinary object as their reference) have the same reference in every world, because the fundamental rules of reference that individuate these senses are rigid, and thus determine the same object in every world. But notice that this would change the role of fundamental rules of reference. As such, fundamental reference rules become even more mysterious. I think it's better to assimilate this version of the view into the view on which senses are primitive, which I will discuss in §6 below.

5. Propositions composed of sense-tokens

There's another way to understand a Fregean view of propositions, given Peacocke's account of sense. This will allow the propositions to satisfy necessary aboutness. This would be a first step to getting them to be of use to AV.

One way to flesh out this view is to adopt a view that Peacocke himself holds. We say the senses described in §3 above are sense-types. These are individuated by fundamental rules of reference. But the direct constituents of propositions are sense-tokens. ¹⁹⁷ What are

¹⁹⁷ This view is more explicit in much earlier presentations of Peacocke's views (e.g. 1981, 1983). These views are different to the view in *Truly Understood*. They're not really even about the same thing. The earlier work is about thought and content, the latter work is about concepts and understanding more generally. I think we're looking at Peacocke's view at a level of abstraction such that the differences between the 1980s view, the 1992 view and the 2008 view don't really matter.

sense-tokens? One thing to note is that, despite the name, sense-tokens are repeatable, in that one single token can occur in multiple thoughts.¹⁹⁸ We can say that a sense-token is an ordered pair of a sense-type and the reference of that sense in a world or context. This view is hinted at in Peacocke's discussion of the first-person concept:

Here, as elsewhere in the literature, [self] is the first-person type of sense. The particular sense used by a particular person in employing a sense falling under the first-person type is individuated by the pair of the sense-type [self] and the person x himself, a pair we can write '[self]_x' (2008, pp.87-88; square brackets in original text)

Note that we shouldn't take this talk of pairs or ordered pairs too literally.¹⁹⁹ The idea here is not that we literally entertain an ordered pair understood as some set theoretic entity. This talk of ordered pairs is just a way to represent the fact that senses are bundled together with their referents in propositions. So these propositions composed of sense-tokens encode information about what the reference of a sense is, not just what fundamental rules of reference the sense is individuated by. As such, these propositions are functionally dependent not only on the senses that they're composed of but also the reference of these senses.²⁰⁰

Let s_1 and s_2 be two sense-types. These are individuated by fundamental rules of reference. These are the same as the senses from §3 and §4 above. The reference of these senses, we argued in §4, can vary from world-to-world. Let object o be the reference of s_1 in some world w and let property F be the reference of s_2 in w. On the sense-token view of propositions, the proposition determined by sense-types s_1 and s_2 in w would be:

$$p_2$$
: $\langle \langle s_1, o \rangle, \langle s_2, F \rangle \rangle$

¹⁹⁸ Peacocke is explicit about this: "the token m.p. [mode of presentation], not the type, must be the constituent of the thought if the thought is to play Frege's rôle ... for the different token m.p.'s of a given type determine distinct objects. But these token m.p.'s should not be thought of as analogous to token expressions, particular utterances or inscriptions [...][a] thought containing token m.p.'s is repeatable." (1981, p.189)

¹⁹⁹ As Peacocke says, in some earlier work "A formal representation of the m.p. $[self_x]$, for example, might be the ordered pair consisting of x and the self type of m.p. (If we adopted this representation, we would have to be careful not to confuse the ability to think of that ordered pair with the ability to employ in thought the token m.p. it represents.)" (1981, p.197; emphasis added)

²⁰⁰ This view is somewhat similar to what Schiffer calls 'quasi-singular' propositions (1978). Also see Recanati 1993, p.31ff. Schiffer and Recanati's discussions are primarily concerned with the semantics of belief attribution sentences and depend on some issues in pragmatics in the philosophy of language. As such, they frame things in a way that is orthogonal to discussion here.

It is natural to say that p_2 is about o in w and that p_2 is true in w iff o satisfies F in w. Our key question here is: is p_2 about o in every world? Does it satisfy necessary aboutness with respect to o, unlike the propositions from §4?

The answer here must surely be yes. If p_2 were about an object other than o, then p_2 would be a different proposition: it would be composed of different sense-tokens. p_2 satisfies necessary aboutness with respect to o for much the same reason that a Russellian proposition like $\langle o, F \rangle$ does.

But this answer might leave us puzzled. We've said that sense-types (like s_1) can vary their reference from world to world, for example if they are senses of ordinary contingent objects. So what's going on here? I suggest we can learn some lessons from our discussion of two-dimensionalism in chapter 7 and distinguish two kinds of world or two roles that worlds can play. We can say that sense-types vary their reference across worlds considered as actual but have the same reference across worlds considered as counterfactual. The picture is this: suppose subject S entertains sense-types s_1 and s_2 in world w. w determines a reference for s_1 and s_2 and determines which proposition S entertains when she entertains s_1 and s_2 . Here we are considering s_1 and s_2 in a different world s_1 when she would have entertained a different proposition in s_1 and s_2 in a different world s_1 when she would have entertained a different proposition in s_1 and s_2 in a different reference for s_1 or s_2 .

Suppose sense-types s_1 and s_2 determine proposition p_2 in w. If p_2 is contingent, then it will be true in some worlds and false in other worlds. When we consider whether p_2 is true or false in a world, we consider worlds as counterfactual. We said above that, for any world w, p_2 is true in w iff o satisfies F in w. When we say things like this, we're considering worlds as counterfactual.

If we accept this picture, then we can say worlds considered as actual fix the reference of the sense-types in a proposition. And worlds considered as counterfactual fix the truth-value of a proposition composed of sense-tokens. A consequence of this is that sense-types have the same reference across all worlds considered as counterfactual. And this allows sense-token propositions to satisfy necessary aboutness. For example, p_2 will be about o

²⁰¹ To deal with indexical senses we will probably need worlds considered as actual to also fix a subject and time. We should probably treat them as centred worlds. I'll ignore this complication here.

in every world (despite the fact that sense-types s_1 and s_2 can vary their reference from world to world).²⁰²

Notice, importantly, that if s_2 is a sense of a property F, the above doesn't mean that the <u>extension of F</u> is fixed across all worlds considered as counterfactual. If that were the case, then p_2 couldn't vary its truth-value in different worlds considered as counterfactual. Rather the <u>reference of s_2 </u> is fixed across all worlds considered as counterfactual. The reference of s_2 will be a property (and not the extension of a property in some world). This reference could be an intension: a function from worlds to extensions.

If that's right, we've found a way for Fregean propositions to satisfy necessary aboutness. This is a first step to getting them to be of use to AV, by satisfying (SAD). Readers will probably notice that this view is reminiscent of Chalmers' enriched propositions view from chapter 7, 6. We could say that this sense-token view is the structured analogue of Chalmers' enriched propositions. To bring this out, notice we could rearrange p_2 to get:

$$\langle \langle s_1, s_2 \rangle, \langle o, F \rangle \rangle$$
.

We could think of this as an ordered pair of a Russellian proposition and the kind of Fregean proposition discussed in §4. We said that this Fregean proposition is the structured analog of the diagonal propositions (or primary intensions) from chapter 7, §5.

Of course, rearranging ordered pairs is not harmless. But remember we are not to take the talk of propositions containing ordered pairs too literally. These ordered structures just represent a pattern of functional dependence. The point here is that it's fairly easy to see how we could recover both a Russellian proposition and a Fregean proposition from p_2 . In fact, in his more recent work Chalmers (2011) himself understands enriched propositions to be basically p_2 .²⁰³

-

²⁰² It may be that this view turns out to be pretty unFregean. We may have to give up on or modify some of (S1)-(S6) from §2. I won't worry about this here.

 $^{^{203}}$ A difference is that Chalmers takes senses (we'd call them 'sense-types') to be primary intensions. (Unlike in chapter 7 (§7), these primary intensions can be intensions of a word or an individual concept; they don't have to be intensions of a whole sentence or proposition.) A sense that has objects as its reference will be a function from scenarios to objects. Call this function f. Roughly we can say that, for any scenario e, f(e) = o iff an idealised subject who had a full description of e would determine e priori that e plays a certain role in e. For example, the primary intension for 'Hesperus' would send each scenario e to the object that an idealised subject who had a full description of e would determine e priori plays the Hesperus role in e. This would roughly give us functions individuated by Peacocke's fundamental reference rules. Clearly, this is to abstract from the details of the view. Chalmers' broader epistemic commitments aren't relevant for us here

Do all the same issues with unstructured enriched propositions apply here? I suggest not. Structure helps us a lot. If we think back to chapter 7, \$6, I had three issues with unstructured enriched propositions. Roughly:

- (a) To make a necessary enriched unstructured proposition singular, we needed to adopt a negative free logic. Otherwise neither component of the enriched proposition will be a singular proposition.
- (b) We had a somewhat vague sense that saying that one proposition is two propositions is just cheating and has some vague unattractive consequences with respect to potentially conflicting truth-conditions and aboutness facts. To solve this we'd have to define *enriched* truth-conditions and aboutness facts, but it was a bit unclear how to do this.
- (c) Enriched unstructured propositions give the wrong verdicts for AV on propositions expressed by 'The actual F is G'.

Issues (a) and (c) will be fairly straightforwardly avoided by structure. Propositions expressed by 'The actual F is G' will have different constituents to paradigmatically singular propositions. This helps with (c). And given structure, we will not be committed to the idea that all necessary propositions are the same proposition. This helps with (a). Also, it's really unclear that (b) is any kind of issue here. It's fairly clear what the truth-conditions and aboutness facts are for the kind of proposition we're discussing in this section. I gave an account of these above.

To conclude: propositions as structures of sense-tokens can at least satisfy necessary aboutness, since sense-types determine the same reference in every world. And senses are partly designed to deal with informative identities. So this will be a promising theory of propositions for AV. I'll return to the question of how these propositions can meet (SAD) and (IID) in §7 and §8.

6. Propositions composed of primitive senses

There's another Fregean view of propositions that AV could hold. We might think we have departed too much from Frege with the sense-token view: we might be suspicious of the idea that we can graft a two-dimensional modal semantics onto Fregean senses. Or we

⁽see chapter 7, §7), although they may be required to give an account of why primary intensions can account for cognitive significance.

might be suspicious of the idea of fundamental reference rules and the baggage associated with them. If so, instead we could go back to a view on which propositions are composed of senses, considered in a more orthodox Fregean way.

On this view there'd only be one type of sense—not sense-types and sense-tokens—but just senses. These will be immediate constituents of propositions. The view I will briefly explore here is that we treat senses as primitive. We say that they are modes of presentation of objects, or ways of thinking of objects, and we say they have features (S1)-(S6) from §2 above. But that's about all we say.

We do need to say a little more, especially about the features of these Fregean propositions when they are considered relative to different worlds. (S1)-(S6) are silent about this. The main claim I will make here is that we have more freedom about the modal properties of Fregean propositions on this view—as compared to the views discussed in \$4 and \$5—given that, on this view, senses aren't individuated by fundamental reference rules and given that the references of senses aren't constituents of these propositions.

On this view propositions look like this:

$$\langle s_1, s_2 \rangle$$

Unlike the view from §4, s_1 and s_2 aren't individuated by fundamental rules of reference. Instead, they're individuated more vaguely, by modes of presentation or ways of thinking, which are notions that we'll leave unanalysed. So unlike in §4, this leaves open the possibility that senses that have ordinary objects as their reference can have the same reference in every world, considered as counterfactual. Unlike fundamental rules of reference, modes of presentation or ways of thinking of ordinary objects don't have to determine different references in different worlds. If we think of these senses as modes of presentation or ways of thinking **of a particular object**, it is natural to say these senses will always have the same reference, including across different worlds (considered as counterfactual).²⁰⁴

This is all to the good, because if we want this view to serve AV and (SAD), then we'll need to draw a distinction between singular and non-singular propositions. So at a minimum, we'll want at least some of our propositions about ordinary objects to satisfy

²⁰⁴ But see §9 below for some discussion of whether we should allow empty primitive senses.

necessary aboutness. To do this they will need to contain senses that have ordinary objects as their reference and have the same reference in every world, considered as counterfactual.²⁰⁵

Even though I've said many or most senses will have the same object as their reference in every world on the primitive sense view, in principle we can also allow for senses that have ordinary objects as their reference, but which vary their reference from world to world (considered as counterfactual). This is possible since, unlike the sense-token view from §5, propositions on the primitive sense view don't have the references of their senses as constituents. So changing the reference of a sense doesn't always change which proposition we have. However, in the next section I will argue that we shouldn't account for non-singular aboutness in this way.

To wrap up this section: again, propositions as structures of primitive senses can at least satisfy necessary aboutness and senses are partly designed to deal with informative identities. As such, this may also be a promising theory of propositions for AV.

7. Singular and non-singular aboutness on a Fregean view

7.1

Given discussion so far, I think it is fairly clear that a Fregean view of propositions—either the sense-token view or the primitive sense view or both—will be able to meet (SAD) in some way or other. In this section I will make a specific suggestion for how they should do this. I will suggest a particular account of how singular and non-singular aboutness is manifested on these Fregean view of propositions. To meet (SAD), I will do this in a way that is fully compatible with the aboutness without properties account of singular propositions from chapter 4 (and, in particular, with (SA) from chapter 4).

I'm going to suggest Fregean views account for this in more or less the same way that a Russellian view of propositions would. On this approach, senses are basically used only to help with informative identities. Senses don't help make the distinction between singular

²⁰⁵ Of course some senses clearly vary their reference from world to world, considered as counterfactual. Propositions are themselves senses and can vary their reference (a truth-value) from world to world, considered as counterfactual.

and non-singular aboutness. The simple and natural suggestion I will put forward here claims:

- A proposition is singularly about object o in w iff it contains a sense that has o
 as its reference in w.²⁰⁶
- A proposition is non-singularly about object *o* in *w* iff it is about *o* in *w* and it contains the sense of an *ι* operator plus the sense of some properties that *o* uniquely satisfies in *w*.

(It is important that these two bullet points aren't intended to give a new account or definition of singular and non-singular aboutness. The aboutness without properties account from chapter 4 still stands. Rather these bullet points explain how the account or definition of singular aboutness from chapter 4—which was totally neutral about the nature of propositions—is manifested *if* propositions are Fregean.)

Let me explain this in more detail. On the view of singular propositions from chapter 4, non-singular aboutness is descriptive aboutness. We have non-singular aboutness when a proposition is about an object because that proposition concerns some properties that the object in question uniquely satisfies. This leads to the following simple and natural suggestion. Suppose that a proposition is about o in w because it concerns the property F and o is the F in w. So the proposition is non-singularly about o in w. Let's suppose that this proposition would be naturally expressed in English with 'The F is G' in w. We can say that this proposition has the following form on the primitive sense view:

$$p_3$$
: $\langle s_i, s_F, s_G \rangle$

And we can say that this proposition has the following form on the sense-token view:

$$p_4$$
: $\langle \langle s_\iota, \iota \rangle, \langle s_F, F \rangle, \langle s_G, G \rangle \rangle$

In both cases the reference of the senses are given by the subscripts. We can think of ι roughly as the referent of the word 'The' when it is used in a definite description. ι will be some kind of function or operator. There are at least two options for what ι is here.

207

²⁰⁶ We may ultimately want to replace the righthand side here with: <u>it contains a *simple* or *non-complex* sense that has *o* as its reference in *w*. See footnote 211, a few pages below (p.209), for some discussion of this.</u>

(A) One option is to say that ι is some kind of definite determiner operator. The idea is that ι combines with F and picks out the unique F in a world. To understand this note it's natural to think of properties such as F (or G) as being functions from individuals to truth-values. So an object o can be 'plugged into' F (or G) to generate a truth-value; F sends o to True (in w) just in case o satisfies F (in w), G sends o to False (in w) just in case o doesn't satisfy G (in w). If we think about properties in these terms, we can think of ι as a function from properties to individuals. ι sends F to o (in w) just in case o is the unique F (in w). Then G sends ι (F) to True (in w) iff o is G (in w). (However, if we think of ι in these terms we have to say something about what ι does when there is no unique F in a world.)²⁰⁸ If we think in terms of a typed lambda calculus, this would make ι an (et, e) type constituent.²⁰⁹

(B) Another option, more inspired by Russell, is to think of ι as some kind of existential quantifier with a uniqueness condition attached. On this view ι would be a function from two properties to a truth-value, or a function from a property, to a function from a property to a truth value. In the proposition above we could think of ι as a function from F to [a function from F to a truth-value], such that ι sends F to the function that sends F to True (in F0) just in case the unique F1 satisfies F3 (in F1). This would make F3 and F4 and F5 (et, F4) type constituent.

I don't want to take a stand on which option we should choose here. In general, I've tried to be neutral about this issue in this thesis. Note that an acquaintance view like AV certainly doesn't have to take the Russellian option (B).²¹⁰

To deal with propositions expressed by 'The actual F is G' we can just add some actuality operator to p_3 and p_4 . Also recall that, on the description-externalist account of descriptive names that I recommended for AV in chapter 5 (§4), descriptive names also express propositions like these. In general, on the Fregean account I'm recommending, *all* propositions that manifest non-singular aboutness look a bit like propositions p_3 and p_4 :

²⁰⁷ More accurately we should say that *the extension of F* (or *G*) at a world, is a function from individuals to truth-values. We saw in §5 that the property *F* itself, which occurs in p_4 , must be an intension (a function from worlds to extensions).

²⁰⁸ The best option might be to say that $\iota(F)$ is undefined in this case.

²⁰⁹ For this kind of notation see Montague 1974. 'e' is for entity, 't' is for truth-value. 'et' is a function from an entity to a truth-value. So (et, e) is a function from [a function from an entity to a truth-value] to an entity. For further discussion, sometimes in relation to something like my ι , see Heim and Kratzer 1998.

²¹⁰ For some discussion of these options—although much more directly concerned with natural language than my discussion here—see Hawthorne and Manley (2012, chapter 5).

they contain the sense of an iota operator and the sense of some properties that the object in question uniquely satisfies.

When a proposition is singularly about an object, in contrast, we can say that the object is the reference of one of the sense-types or primitive senses that compose the proposition. So propositions that are singularly about *o*, expressed by '*o* is G', would look like this:

$$p_5$$
: $\langle \langle s_o, o \rangle, \langle s_G, G \rangle \rangle$ (on the sense-token view) p_6 : $\langle s_o, s_G \rangle$ (on the primitive sense view)

This simple picture works well. All singular propositions will clearly satisfy necessary aboutness and aboutness without properties. All non-singular propositions will clearly fail to satisfy aboutness without properties. This is exactly what (SAD) demands. Let's spell this out in a bit more detail:

Given my discussion of primitive senses and sense-tokens, p_5 and p_6 will satisfy necessary aboutness with respect to o. And it seems natural to think that p_5 and p_6 will satisfy the negative part of aboutness without properties with respect to o as well. For every world w: it's not the case that p_5 and p_6 are about o because they concern a property that o satisfies in w. Rather, they are about o in w because o is the reference (in w) of a sense contained in these propositions. So there's no issue with saying p_5 and p_6 are singularly about o, on AV's aboutness without properties account of singular thought.

Since p_5 and p_6 are singular propositions, AV will say p_5 and p_6 can be entertained in a world only if a subject is acquainted with o. Stronger than this, AV will say that a sense that has object o as its reference in o can be entertained by a subject o in o only if o is acquainted with o in o.

On the other hand, if o is the F in w, p_3 and p_4 will be about o in w. But they will fail to satisfy aboutness without properties with respect to o, even if they did happen to satisfy necessary aboutness with respect to o. The propositions are about o in w because they each concern the property F and because o is the F in w. So there's no issue with saying p_3 and p_4 are non-singularly about o.²¹¹

²¹¹ There's a complication here. On one understanding of Frege's view, senses can combine to form more complex senses. The point is easiest to explain with a linguistic example. Take the sentence 'The F is G'. The thought or proposition expressed by this sentence will be composed of a sense for 'The', a sense for 'F' and a

As I said above, it might be helpful to note that I am suggesting that a Fregean view account for singular and non-singular aboutness in more or less exactly the same way as we would on a Russellian view of propositions and as we would if we adopted Fine's coordinated propositions view. On these views we would say 'o is F', 'The F is G' and 'The actual F is G' express propositions like the following:

 $\langle o, F \rangle$

 $\langle \iota, F, G \rangle$

 $\langle \iota, @, F, G \rangle$

Adding senses (or coordination schemes) to these propositions doesn't make a difference regarding the aboutness properties of these propositions. As such, on my proposal we do not use senses to help us account for non-singular aboutness, or to help us make the distinction between singular aboutness and non-singular aboutness. On the view I am recommending, we more-or-less only use senses to help us account for informative identities.

For these reasons, both Fregean views of propositions can meet (SAD) from chapter 6. They are compatible with the account of singular thought from chapter 4. They can give an account of singular and non-singular aboutness that accords with aboutness without properties account of singular thought. For example, unlike unstructured proposition

sense for 'G'. These senses combine to determine the complex sense that is the proposition expressed by the sentence. But not all complex senses are propositions. The sense of 'The' and the sense of 'F' can also combine to give the complex sense 'The F'. This complex sense will have an object as its reference (or maybe a function,

depending on how we understand definite descriptions). It can combine with the sense of 'G' to determine a proposition. It's unclear whether this aspect of Frege's view could carry-over to the sense-token view, but it might do for the primitive sense view. If that's right, then p_3 (for example) could also be specified with:

where $s_{\iota F}$ is the sense of 'The F'. If the reference of $s_{\iota F}$ is an object, then this proposition will satisfy our account of singular aboutness. But p_3 was only supposed to manifest non-singular aboutness. To solve this problem, we could make a distinction between simple senses and complex senses. $s_{\iota F}$ would be a complex sense which is built up of two simple senses (s_ι and s_F). Then we could say that a proposition is singularly about an object o in w iff it contains a *simple* sense that has o as its reference in w. And AV would say a subject can entertain a *simple* sense that has an object o as its reference in a world only if a subject is acquainted with o in that world. (Note that this would mean that, if the sense-token view allows complex senses, it would have to say that some complex senses can vary their references from world to world, considered as counterfactual. That said, I don't think this aspect of Frege's view—simple senses composing into complex senses—can really be a part of the sense-token view.)

views, they do not lead us into a situation where paradigmatically singular and non-singular propositions are identical.

The simple and natural view just sketched is certainly not the *only* way the two Fregean views of propositions (the sense-token view and the primitive sense view) could meet (SAD). The obvious alternative is that we sometimes allow a proposition to be nonsingularly about on object o (in a world) merely because that proposition contains a sense that has o as its reference (in that world). But this alternative option raises some challenges and potential problems regarding (SAD). On this alternative view, there will be singular and non-singular propositions that are structurally identical, i.e. contain the same number of senses arranged in the same way, whilst being about exactly the same objects. There will be propositions that are non-singularly about some object o which are structurally identical to propositions which are singularly about o. This will make it more difficult, than it was above, to distinguish singular propositions (which satisfy aboutness without properties) and non-singular propositions (which do not). I do not have any strong reasons to think that these challenges cannot be met. But I am not going to discuss them any further here. It is sufficient, for the purposes of my argument, to show there is at least one way that the sense-token and primitive sense Fregean views can meet (SAD). I showed this for the simple and natural suggestion put forward in this subsection.

7.2

To finish this section, I will make a more general point. Why and how have the Fregean views discussed in this chapter managed to meet (SAD) in a way that the unstructured possible worlds view from chapter 7 failed to?

The main problem we encountered in chapter 7 was that, on the unstructured possible worlds views, some rigid paradigmatically non-singular judgements (e.g. those expressed by 'The actual F is G') were assigned the very same propositional content as paradigmatically singular judgements. Propositions were not individuated with enough fineness of grain to allow us to distinguish singular and non-singular propositions. Adding more fineness of grain via even the most full-blooded two-dimensionalism didn't help. It's the structure afforded to us by Fregean propositions that has made most of the difference here. On the account I've given, singular propositions and non-singular, descriptive propositions have different structure. If we have a singular proposition p and a non-singular proposition p*, which are about all the same objects in every world, p* will always

have more structural complexity, on the view offered here. This is because p^* will contain a sense of something like the ι operator introduced above, plus the sense of some properties that the objects p^* is about uniquely satisfy. For these reasons, we will never end up with a situation in which p is the same as p^* , as we sometimes did on the unstructured possible worlds views. Structured propositions give us a special kind of fineness of grain that can allow them to fairly easily meet (SAD) from chapter 6.

8. Informative identities on a Fregean view

The second desideratum from chapter 6—(IID)—demands a theory of propositions that can give a solution to the problem of informative identities, one that is preferable to Russell's retreat to descriptions. As we would expect on a Fregean view, the solution to the problem of informative identities is strikingly straightforward. Here we get some pay-off for adding senses to our propositions.

Let's set this out in terms of the sense-token view. Picking up on the example we used in chapters 6 and 7, on the sense-token view my judgement expressed by ' bee_T ' is the same as bee_Y ' would have the following proposition as its content:²¹²

$$\langle \langle s_T, b \rangle, \langle s_=, = \rangle, \langle s_Y, b \rangle \rangle$$

 s_T and s_Y are two different sense-types with two different (implicitly grasped) fundamental reference rules. This explains why the identity judgement is informative and is something I can doubt or find out. What I knew all along will be:

$$\langle \langle s_T, b \rangle, \langle s_=, = \rangle, \langle s_T b \rangle \rangle$$

And:

 $\langle \langle s_V, b \rangle, \langle s_=, = \rangle, \langle s_V b \rangle \rangle$

Since these each contain sense-types with the same (implicitly grasped) fundamental reference rules, the judgements are not informative. They are just trivial judgements of self-identity.

²¹² Both s_T and s_Y have b (the bee) as their reference. b is the reference of both the names ' bee_T ' and ' bee_Y '. s_T is the sense associated with ' bee_T '; s_Y is the sense associated with ' bee_Y '.

When I doubt that the bee that visited me yesterday is the same as the bee that visited me today, what I judge is something like:

$$\langle \langle s_{\neg}, \neg \rangle, \langle s_{T}, b \rangle, \langle s_{=}, = \rangle, \langle s_{Y}, b \rangle \rangle$$

Since $s_T \neq s_Y$ and $\langle s_T, b \rangle \neq \langle s_Y, b \rangle$ this doesn't contradict the trivial identity propositions that I already knew.

As a bonus, we can also give a neat account of trading on identity on this Fregean view.²¹³ Unlike with coordinated propositions, we don't need contents of judgement to be coordinated sequences of propositions. And we don't need to give an unclear and mysterious account of coordination across propositions or of collective content. We can just say that trading on identity is licensed or rational across two propositions containing at least one of the same sense-type, and that an identity premise is needed to trade on identity across two propositions composed of different sense-types. For example, we can say the following inference requires an identity premise:

(1)
$$\langle \langle s_T, b \rangle, \langle s_F, F \rangle \rangle$$

(2)
$$\langle \langle s_Y, b \rangle, \langle s_G, G \rangle \rangle$$

(3)
$$\langle \langle s_T, b \rangle, \langle s_=, = \rangle, \langle s_Y, b \rangle \rangle$$

(4)
$$\langle \langle s_T, b \rangle, \langle s_F, F \rangle, \langle s_{\wedge}, \wedge \rangle, \langle s_T, b \rangle, \langle s_G, G \rangle \rangle$$

But this inference does not:

$$(1') \langle \langle s_T, b \rangle, \langle s_F, F \rangle \rangle$$

 $(2') \langle \langle s_T, b \rangle, \langle s_G, G \rangle \rangle$

$$(3')$$
 $\langle \langle s_T, b \rangle, \langle s_F, F \rangle, \langle s_A, \Lambda \rangle, \langle s_T, b \rangle, \langle s_G, G \rangle \rangle$

We can trade on the identity of b in (1') and (2'), without any identity premise, because of the sameness in sense-type in the two premises. We cannot trade on the identity of b in (1) and (2) without an identity premise, because we have different sense-types in (1) and (2). However, the identity premise (3) is useful in the first argument, because we can trade on

-

²¹³ This is roughly how Campbell (1987) himself solves the problem, although there are aspects of Campbell's discussion (related to different sensory modalities) that I won't touch on here.

the identity of b between (1) and the first sense-token in (3) and between (2) and the third sense-token in (3).

A key advantage of the Fregean view, over Fine's view, is that it gives a uniform account of representation as the same—or coordination, or *de jure* co-reference—within a single proposition and across different propositions. (We have coordination within a single proposition in cases of informative identity and coordination across different propositions in cases of trading on identity.) Unlike Fine, the Fregean does not have to give a strange and implausible account of coordination across different propositions. Things are totally parallel on the primitive sense view. I won't run through this here. Both Fregean views of propositions can clearly meet (IID).

9. Empty senses and empty thoughts

There is a loose end that a Fregean view might help us tie up. In chapter 3, §7 I offered an account of thought that purports to be singularly about the non-existent, one that is amenable to AV. AV entails that all thoughts that purport to be about non-existent objects are non-singular, even when they purport to be singular and even when they are subjectively indistinguishable from genuine singular thoughts. In chapter 3, I offered the following account of these thoughts for AV: episodes of thinking that purport to be singularly about the non-existent are realised or actualised by similar vehicles or concepts to those that realise or actualise episodes of genuine singular thinking. This can explain the similarity between empty 'singular' thought and genuine singular thought. The difference between the thoughts is that the empty episodes of thinking do not have a singular proposition as their content.

This account raised the question: What propositions *are* entertained during episodes of thought that purport to be singularly about the non-existent? AV needs these propositions to be non-singular. And we probably want these propositions to be such that any atomic proposition of this kind is false.²¹⁴ Then, on the face of things, we'll get the correct truth-conditions for atomic and non-atomic empty thoughts. (At least, we'll get these for non-fictional objects. As in chapters 3 and 5, let's bracket-off fictional discourse.)

²¹⁴ Another option—actually more Fregean—is that we treat atomic propositions of this kind as having a third value, such as undefined. To simplify discussion here I'll assume bivalence.

In chapter 3 (§7) I said we need some stronger commitments about the nature of propositions to settle these issues any further. I think Fregean propositions can help here. To see this, recall that in chapter 3 I suggested, in a non-committal way, that AV might appeal to gappy propositions here. ²¹⁵ We can represent a gappy Russellian proposition with the following:

 $\langle ,F \rangle$

We can combine this with the following truth-conditions for monadic atomic Russellian propositions:

If P is a proposition having a single subject position and a one-place property position, then P is true iff the subject position is filled by one, and only one, object, and it exemplifies the property filling the property position. If P is not true, then it is false. (Braun 2003, p.463)

So the gappy proposition above is false, because it is not true. The idea would be that all thoughts that purport to be singularly about the non-existent have a proposition like the above as their content. For example, this proposition might be expressed by a sentence of the form 'Vulcan is F'. 216

There are prima facie reasons to be suspicious of gappy propositions.²¹⁷ I'll discus two problems here.

First, gappy propositions are very coarse-grained (at least, for structured propositions). The gappy proposition above would be the content of both the judgements expressed by 'Vulcan is F' and 'Paul R. Zwier is F'. If fictional names are just ordinary empty names, the proposition above could be expressed by both 'Pegasus is F' and 'Medusa is F'. But, on the face of things, it seems as if these should be different propositions and judgements, with different contents.

²¹⁷ For scepticism about gappy propositions, see Mousavian 2011, Everett 2003, Sainsbury and Tye 2012, §8.2 ²¹⁸ This example is from Larson and Segal 1995:

Suppose mischievous students were to enter the name *Paul R. Zwier* into the registry files of a university computer. They compile a complete bogus record to go with the name, including educational background, home address GPA, etc. A university official happens to read the file and comes to believe various things about the fictitious student. (pp.164-165)

²¹⁵ This sort of view is most strongly associated with Braun 2003, 2005. Braun himself would put the empty set in the gap, since he would represent an ordinary Russellian proposition with $\langle \{o\}, F \rangle$. This won't matter to us here. We shouldn't take this set theoretic symbolism too seriously or literally.

²¹⁶ Let's suppose 'Vulcan' is not an empty *descriptive* name.

Second, it's not obvious that, on reflection, the notion of a gappy proposition really makes sense. On a simple-minded version of this worry, we can point out that ordered *n*-tuples can't have gaps. So the symbolism that represents the proposition above doesn't really make sense. But this worry takes the symbolism above too seriously. No one, I think, is claiming that structured propositions are literally ordered pairs or set theoretic entities. It's just that we can represent them in this way. So maybe it's fine to abuse the notation of set theory a little. But still, it is not obvious that it really makes sense to say that a proposition can have nothing, or a gap, as one of its parts or components. It's not obvious what the metaphysics of Russellian propositions would have to be, in order to allow gappy propositions—which have gaps as parts—to count as propositions.

That said, recall that I have suggested we understand claims about constituency and structure in propositions as claims about the individuation of propositions, rather than the mereology or metaphysics of propositions (see chapter 4, §3 and chapter 8, §1). If we take this approach, a gappy proposition needn't have a hole or gap as one of its parts. Instead, we'd say gappy propositions are individuated by a whole or gap. What could this mean? Well we could say that gappy propositions like the one above are propositions that are individuated solely by which property occurs in the second position. Which object (if any) occurs in the first position makes no difference to the individuation of the proposition. Does this make sense? Does this give us a genuine proposition? I'm not totally sure. This would require further investigation and some more determine commitments about exactly what propositions are.

Swapping from a Russellian view of propositions to a Fregean view can help avoid these worries. On the sense-token view, an empty 'singular' proposition could look like this:

$$\langle \langle s_1, \rangle, \langle s_2, F \rangle \rangle$$

 s_1 is a sense without a reference. This clearly helps with the fineness of grain problem above. The thoughts expressed by 'Vulcan is F' and 'Pegasus is F' will contain different senses and be different propositions. This proposition still has a gap. So the sense-token view will work only if the second problem above can be solved, i.e. only if we can make sense of gaps in structured propositions.

On the primitive sense view an empty 'singular' proposition could look like this:

$$\langle s_3, s_4 \rangle$$

Again, s_3 would be a sense with no reference. s_4 would be an ordinary primitive sense of a property. Since objects themselves are never immediate constituents of primitive sense propositions, there is no problem with gaps here. Both the worries above are avoided.

The Fregean propositions above involve senses without a reference. Frege himself certainly seemed to allow sense without reference. ²¹⁹ There is some interpretative controversy whether Frege really meant this—or for how long he meant it—but I'm not going to worry about this interpretive issue here. ²²⁰ A view that allows sense without reference is still worthy of the label 'Fregean'. But does the notion of sense without reference make sense, given how I have understood Fregean sense in this chapter?

I think it is fairly clear that sense-types, like s_1 above, can fail to have a reference at a world. These sense-types are individuated by Peacokce's fundamental reference rules. Fundamental reference rules give the (fundamental) *conditions* that determine the reference of a sense. In some worlds, nothing might satisfy or fulfill these conditions. A sense-type would have no reference in such a world. An empty sense-token—composed of a sense-type and its referent (if any)—will be acceptable only if we can be comfortable with the kind of gaps or holes discussed above. We can see that the empty sense-token proposition above, on the previous page, clearly contains a gap or hole.

Can primitive senses be empty? I said, rather vaguely, that primitive senses are individuated by modes of presentation or ways of thinking. It's not clear there could be a *mode of presentation* of nothing. Talk of 'presentation' seems to entail that *something* is presented. But it is less clear that we must understand *ways of thinking* in this object-dependent, relational way.²²¹ Perhaps there can be different ways of thinking of nothing. If so, and if we want primitive senses to be potentially empty, we will have to say they are individuated by ways of thinking understood as the *conditions* under which an object would be the reference of that sense. These conditions will need to be rigid, so that primitive senses refer to the same object (if any) at every world considered as

²²¹ Although cf. Evans 1982, p.22.

²¹⁹ For example, he seems to explicitly say this in 'On Sense and Reference' (1892) at p.25 and pp.28-29. (My page references are to the reprint of the Max Black translation in Moore 1993.)

Evans (1982, chapter 1) vociferously argues that Frege didn't really mean to allow empty senses (and did so only temporarily). See Bell 1990 for argument that Evans is incorrect on this interpretative point. Dummett (1973, p.160ff) argues that Frege did allow empty senses but that this doesn't leave his view in a happy position. Also see Sainsbury 2002, pp.9-14 and essay 12 for discussion of sense without reference.

counterfactual. This would ensure that singular primitive sense propositions can satisfy necessary aboutness.

AV is committed to the claim that all of these empty Fregean propositions are non-singular. *If* propositions are Fregean, in §7.1 I said we can say the following about singular Fregean propositions:

A proposition p is singularly about object o in w iff p contains a sense that has
o as its reference in w.²²²

Given that I've said senses must be rigid, any Fregean proposition that contains a sense that is empty in at least one world will fail to be singularly about an object in any world, considered as counterfactual. And in chapter 4 (§5) I said:

• A proposition *p* is singular iff there is some object *o* such that: *p* is singularly about *o* in every world in which *p* exists.

So no empty Fregean proposition—i.e. no proposition that contains a sense that is empty in at least one world—will count as singular. This is the verdict that AV wants.

More work would need to be done to fully work out all the details here. For example, we'd need a semantics for Fregean propositions that makes all atomic empty propositions false. And we'd need an account of the compositionality of reference that can deal with senses with no reference. The modest conclusion I want to draw here is just that AV has different options regarding the propositions that are the contents of thoughts that purport to be singularly about the non-existent. Adopting a Fregean view of propositions expands these options and potentially solves some problems for these options.

10. Conclusions

In the last few sections I have argued that two Fregean views can meet both desiderata—(SAD) and (IID)—from chapter 6. This means both Fregean views of propositions can serve AV. Another way to put this point is that we have revealed some interesting and surprising commitments that must be taken on by AV. If AV wants to solve the problem

²²² Recall, importantly, that this bullet point does not replace or conflict with (AV4) and (SA). It is how I've suggested (AV4) and (SA), which are totally neutral about the nature of propositions, are manifested or actualised, if propositions are Fregean.

of informative identities at the level of propositional content, AV will be committed to a view similar to one of these structured Fregean views, since only these views have managed to meet both (SAD) and (IID). (Recall, if AV doesn't want to solve the problem of informative identities in this way, it can just adopt a simple, structured Russellian view of propositions.)

One key thing I want to emphasise is that it's the fact that these Fregean views hold that propositions are structured that made a lot of the difference here. Structure very much helps us to distinguish between singular and non-singular propositions that satisfy necessary aboutness with respect to some object (for example, those in our actual *F* cases). Roughly speaking, we've said non-singular judgements about objects have more descriptive structure. Thus the move to structured propositions allows us to mark non-singular propositions as distinct from singular propositions. We don't end up with a situation in which a paradigmatic singular proposition is the very same as a non-singular proposition.

Structure also helps with the problem of informative identities. What helped here is that it's helpful if we can consider identity judgements as having structured contents that present the object the identity judgement is about twice. We can then account for differences in informativeness in terms of the relationship between the two presentations of the object—for example, in terms of sameness of sense.

In addition to structured propositions, the Fregean views give us senses, which help with informative identities. Essentially, in the terms we introduced in our discussion of Fine in chapter 8, senses give us an account of *representation as the same* in terms of *representation in the same way*. In chapter 8 I argued this is preferable to understanding representation as the same in terms of coordination schemes, due to the difficulties coordination schemes face when it comes to representation as the same across different propositions.

However, I've only appealed to a relatively thin and programmatic understanding of sense here. On the primitive sense view, we have an extremely thin and programmatic understanding of sense. On the sense-token view we have a somewhat fuller account of sense. But on the understanding of this view that I have recommended, sequences of sense-types are similar to diagonal propositions. And something like fundamental reference rules, which we've taken to individuate sense-types on the sense-token view, were at play

in our discussion of two-dimensionalism. So on one way of looking at things, the sense-token view doesn't really have many more resources than the two-dimensionalist views discussed in chapter 7. The key difference here is that the Fregean view can apply these resources to structured propositions.

This may bring out that we needn't necessarily be wedded to the Fregean views being our only option for AV. Another structured view of propositions, which has some resources to deal with identity puzzles, could also work for AV. These needn't directly be inspired by Russellian or Fregean views of propositions.

For example, there are some views that blend structured propositions with the unstructured propositions from chapter 7. This kind of view might work for AV. For instance, Dilip Ninan (2012, 2013) has developed a 'multi-centred worlds' view. On this view, very roughly, a proposition is a set of possible worlds, but propositions only get a truth-value (and aboutness properties) relative to a structure of pairs of objects and acquaintance relations. If we squint a little and don't worry about the details, this structure of pairs of objects and relations may look like a Fregean sense-token proposition from §5. Ninan's acquaintance relations very roughly play the role of sense-types for (at least some) singular terms. Now whether this kind of view would ultimately work for an acquaintance view is not something I will pursue here. Setting up Ninan's view would take a whole chapter and this would probably be repetitive of my discussion in chapters 7-9. The point is, Ninan's view might seem to have enough structure to work for AV, while also being designed partly to deal with identity puzzles.

Overall summary and conclusions

In this thesis I defended an acquaintance view and explored the consequences of adopting this acquaintance view. The view I defended—AV—is committed to at least the following four claims:

(AV1) A subject can entertain a thought that is singularly about *o* only if that subject is acquainted with *o*.

(AV2) Some objects of acquaintance are ordinary objects.

(AV3) A subject is acquainted with an object *o* iff that subject bears at least one of the following three relations to *o*: (i) perceptual acquaintance; (ii) memory acquaintance; (iii) communication-based acquaintance.

(AV4) A thought is singularly about o iff that thought satisfies aboutness without properties with respect to o.²²³

In part one of this thesis, I defended, motivated and explicated these four claims. In part two of this thesis, I explored the consequences of adopting AV. In particular, I explored what account of propositions must be held by AV, especially given its commitment to (AV4) (and (SA) from chapter 4). Here are my four main conclusions:

First, defending an acquaintance view requires choosing an account of singular thought. I've argued the account I chose for AV is a really good account of singular thought, but it is not the only possible good account. An acquaintance view like AV should (and must) content itself with the claim that acquaintance is required for singular thought, given at least one of the good accounts of singular thought (see chapter 1).

Second, AV is defensible given this account of singular thought, since:

a) AV gives a unified and well-motivated account of what acquaintance is (see chapter 3, \$2 and \$3).

²²³ In chapter four I argued in support of the following way to make (AV4) more precise.

⁽SA) A proposition p is singularly about o in w iff (i) for any world w^* : if p exists in w^* , then p is about o in w^* ; and (ii) it's not the case that p is about o in w merely by concerning one or more of o's properties in w.

- b) AV in general is a theoretically motivated view that rests on a claim about the explanatory role of perception, with respect to our thoughts about objects in the world. AV claims that perception is the fundamental way in which our thoughts make contact with the world (see chapter 5, §2).
- c) AV can respond to apparent counterexample cases via a description-externalist account of descriptive names (see chapter 5, §4) and via the account of empty thought offered in chapter 3, §7 and augmented chapter 9, §9.
- d) AV can respond to the prima facie puzzles, inherited from Russell, concerning informative identity judgements (see chapters 6 and 9) and informative existential judgement (see chapter 3, §6).

Third, AV is committed to structured propositions, given (AV4) and given that it takes singularity to be a property of propositions (see chapter 7).

Fourth, and finally, if AV wants to solve the problem of informative identities at the level of propositional content, then AV is committed to something similar to a Fregean view of structured propositions. For example, it could adopt either the sense-token or the primitive sense Fregean views sketched in chapter 9.

References

Almog, Joseph (1986) 'Naming without necessity'. Journal of Philosophy, 83: 210-242.

Amijee, Fatema (2013) 'The Role of Attention in Russell's Theory of Knowledge'. *British Journal for the History of Philosophy*, 21: 1175-1193.

Aydede, Murat (1998) 'Fodor on concepts and Frege puzzles'. *Pacific Philosophical Quarterly*, 79: 289-294.

Azzouni, Jody (2011) 'Singular Thoughts (Object-Directed Thoughts)'. *Aristotelian Society Supplementary Volume*, 85: 45-61.

Bach, Kent (1987) Thought and Reference. Oxford University Press.

Bach, Kent (2010) 'Getting a Thing Into a Thought.' In Robin Jeshion (ed.), *New Essays on Singular Thought*. Oxford University Press.

Bell, David (1979) Frege's Theory of Judgement. Oxford University Press.

Bell, David (1990) 'How 'Russellian' Was Frege?'. Mind, 99: 267-277.

Benacerraf, Paul (1965) 'What numbers could not be'. *Philosophical Review*, 74: 47-73.

Bostock, David (2012) Russell's Logical Atomism. Oxford University Press.

Brewer, Bill (2011) *Perception and its Objects*. Oxford University Press.

Braun, David (1993) 'Empty Names'. Noûs, 27: 449-469.

Braun, David (2005) 'Empty names, fictional names, mythical names'. Noûs, 39: 596-631.

Burge, Tyler (1974) 'Truth and Singular Terms'. Nous, 8: 309-25.

Burge, Tyler (1979) 'Individualism and the mental'. *Midwest Studies in Philosophy*, 4: 73–121.

Button, Tim and Sean Walsh (2018) *Philosophy and Model Theory*. Oxford University Press.

Byrne, Alex (2001) Intentionalism defended. Philosophical Review, 110: 199-240.

Campbell, John (1987) 'Is Sense Transparent?' *Proceedings of the Aristotelian Society*, 88: 273-292.

- Campbell, John (2002) Reference and Consciousness. Oxford University Press.
- Campbell, John (2009) 'Consciousness and Reference'. In Brian McLaughlin, Ansgar Beckermann and Sven Walter (eds.), *The Oxford Handbook of Philosophy of Mind*. Oxford University Press.
- Chalmers, David (2002) 'On sense and intension'. Philosophical Perspectives, 16: 135-82.
- Chalmers, David (2006) 'The Foundations of Two-Dimensional Semantics'. In Manuel Garcia-Carpintero and Josep Macia (eds.), *Two-Dimensional Semantics*. Oxford University Press. pp. 55-140.
- Chalmers, David (2011) 'Propositions and Attitude Ascriptions: A Fregean Account'. *Noûs*, 45: 595–639.
- Cohen, Jonathan and Aaron Meskin (2004) 'On the epistemic value of photographs'. *Journal of Aesthetics and Art Criticism*, 62: 197–210.
- Costello, Diarmuid and Dawn M. Phillips (2009) 'Automatism, causality and realism: Foundational problems in the philosophy of photography'. *Philosophy Compass*, 4: 1-21.
- Crane, Tim (2011) 'The Singularity of Singular Thought'. *Aristotelian Society Supplementary Volume*, 85: 21-43.
- Crane, Tim (2012) 'Review: *The Reference Book*, by John Hawthorne and David Manley.' *Times Literary Supplement*.
- Crane, Tim (2013) Objects of Thought. Oxford University Press.
- Currie, Gregory (1991) 'Photography, painting and perception'. *Journal of Aesthetics and Art Criticism*, 49: 23-29.
- Davidson, Donald (1989) 'What Is Present to the Mind?' In Johannes Brandl and Gombocz Wolfgang (eds.) *The Mind of Donald Davidson*. Rodopi.
- Davies, Martin and Lloyd Humberstone (1980) 'Two notions of necessity'. *Philosophical Studies*, 38: 1-31.
- Dennett, Daniel C. (1968) Content and Consciousness. Routledge.
- Devitt, Michael (1981) Designation. Columbia University Press.
- Dickie, Imogen (2015) Fixing Reference. Oxford University Press.

Dickie, Imogen and Gurpreet Rattan (2010) 'Sense, Communication, and Rational Engagement'. *Dialectica*, 64: 131-151.

Dretske, Fred (1995) Naturalizing the Mind. MIT Press.

Dummett, Michael (1973) *Frege: Philosophy of Language*. Duckworth. [References to the 1981 2nd edition.]

Dummett, Michael (1993) 'Existence'. In The Seas of Language. Oxford University Press.

Evans, Gareth (1973) 'The Causal theory of Names.' Reprinted in *Gareth Evans: Collected Papers*. Oxford: Clarendon Press. pp.1-24.

Evans, Gareth (1982) *The Varieties of Reference*. John McDowell (ed.). Oxford University Press.

Evans, Gareth (1985) 'Understanding Demonstratives.' Reprinted in *Gareth Evans: Collected Papers*. Oxford: Clarendon Press. pp.291-321.

Everett, Anthony (2003) 'Empty names and 'gappy' propositions'. *Philosophical Studies*, 116: 1-36.

Fine, Kit (2007) Semantic Relationism. Wiley-Blackwell.

Fodor, Jerry A. (2000) 'Replies to Critics'. Mind and Language, 15: 350-374.

Frege, Gottlob (1892) 'On Sense and Reference'. In Max Black and Peter Geach (eds. and trans.), *Translations from the Philosophical Writings of Gottlob Frege* (1980). Blackwell Publishing. [References to the reprint in Moore (1993).]

Frege, Gottlob (1918-19) 'The Thought: A Logical Enquiry'. Mind, 65: 289-311

Garcia-Carpintero, Manuel and Josep Macia (eds.) (2006) *Two-Dimensional Semantics*. Oxford University Press.

Genone, James (2014) 'Evidential Constraints on Singular Thought'. *Mind and Language*, 29: 1-25.

Glick, Ephraim N. (2018) 'What is a Singular Proposition?'. Mind, 127: 1027-1067.

Goodman, Rachel (2016) 'Cognitivism, Significance and Singular Thought'. *Philosophical Quarterly*, 66: 236-260.

Goodman, Rachel (2018) 'Do Acquaintance Theorists Have an Attitude Problem?'. *Australasian Journal of Philosophy*, 96: 67-86.

- Goodman, Rachel; James Genone and Nick Kroll (eds.) (2020) Singular Thought and Mental Files. Oxford University Press.
- Gray, Aidan (2022) 'Minimal Fregeanism'. Mind, 131: 429-458.
- Griffin, Nicholas (1985) 'Russell's multiple relation theory of judgment'. *Philosophical Studies*, 47: 213-247.
- Harman, Gilbert (1990) 'The Intrinsic Quality of Experience'. In James Tomberlin (ed.) *Philosophical Perspectives*, 31–52.
- Hawthorne, John and David Manley (2012) The Reference Book. Oxford University Press.
- Heck, Richard Kimberly (1995) 'The Sense of Communication'. Mind, 104: 79-106.
- Heck, Richard Kimberly (2002) 'Do demonstratives have senses?' *Philosophers' Imprint*, 2: 1-33.
- Heck, Richard Kimberly (2012) 'Solving Frege's Puzzle.' *Journal of Philosophy*, 109:132-174.
- Heim, Irene and Angelika Kratzer (1998) *Semantics in Generative Grammar*. Blackwell Publishing.
- Hintikka, Jaakko (1962) Knowledge and Belief: An Introduction to the Logic of the Two Notions. Cornell University Press.
- Hinton, J. M. (1967) 'Visual experiences'. Mind, 76: 217-227.
- Hodes, Harold (1984) 'Logicism and the ontological commitments of arithmetic'. *Journal of Philosophy*, 81: 123-149.
- Hodes, Harold (1990) 'Where do the natural numbers come from?'. Synthese, 84: 347-407.
- Hodgson, Thomas (2018) 'Russellians can have a no proposition view of empty names'. *Inquiry: An Interdisciplinary Journal of Philosophy*, 6: 670-691.
- Hodgson, Thomas (2022) 'Russellians should have a no proposition view of empty names'. Inquiry: An Interdisciplinary Journal of Philosophy.
- Jackson, Frank (1977) Perception: A Representative Theory. Cambridge University Press.
- James, William (1890) The Principles of Psychology. Harvard University Press.
- Jeshion, Robin (2010) 'Singular Thought: Acquaintance, Semantic Instrumentalism and Cognitivism'. In Robin Jeshion (ed.) *New Essays on Singular Thought*. Oxford University Press.

- Jeshion, Robin (ed.) (2010) New Essays on Singular Thought. Oxford University Press.
- Jeshion, Robin (2014) 'Two Dogmas of Russellianism'. In Manuel García-Carpintero and Martí Genoveva (eds.) *Empty Representations*. Oxford University Press.
- Kaplan, David (1968) 'Quantifying in'. Synthese, 19: 178-214.
- Kaplan, David (1989) 'Demonstratives'. In Joseph Almog, John Perry and Howard Wettstein (eds.), *Themes From Kaplan*. Oxford University Press. pp. 481-563.
- King, Jeffery C. (2020) 'Singular Thought, Russellianism, and Mental Files'. In Rachel Goodman, James Genone and Nick Kroll (eds.), *Singular Thought and Mental Files*. Oxford University Press.
- Kripke, Saul (1980) Naming and Necessity. Harvard University Press.
- Lambert, Karel (2001) 'Free Logics'. In Lou Goble (ed.), *The Blackwell Guide to Philosophical Logic*. Blackwell Publishing.
- Larson, Richard K. and Gabriel Segal (1995) Knowledge of Meaning: An Introduction to Semantic Theory. MIT Press.
- Lewis, David (1979) 'Attitudes de dicto and de se'. Philosophical Review, 88: 513-545.
- Linnebo, Øystein (2017) Philosophy of Mathematics. Princeton University Press.
- Linsky, Bernard (2015) 'Acquaintance and Certainty in *The Problems of Philosophy*'. In Donovan Wishon and Bernard Linksy (eds.) *Acquaintance, Knowledge, and Logic: New Essays on Bertrand's Russell's The Problems of Philosophy*. CSLI Publications. pp. 65-86.
- Mackie, J. L (1976). 'The Riddle of Existence'. Aristotelian Society Supplementary Volume, 50: 247-289.
- Martin, M.G.F. (2001) 'Out of the past: Episodic recall as retained acquaintance'. In Christoph Hoerl and Teresa McCormack (eds.), *Time and Memory*. Oxford University Press. pp. 257-284.
- Martin, M.G.F. (2002) 'Particular Thoughts and Singular Thought'. Royal Institute of Philosophy Supplement, 51: 173-214.
- Martin, M.G.F. (2004) 'The Limits of Self-Awareness'. Philosophical Studies, 120: 37–89.
- Martin, M.G.F. (2006) 'On being alienated'. In Tamar S. Gendler and John Hawthorne (eds.), *Perceptual Experience*. Oxford University Press.

- Martin, M.G.F. (2015) 'Old Acquaintance: Russell, Memory and Problems with Acquaintance.' *Analytic Philosophy*, 56: 1-44.
- Martin, M.G.F. (2019) 'Betwixt Feeling and Thinking: Two-Level Accounts of Experience'. In Jonathan Knowles and Thomas Raleigh (eds.), *Acquaintance: New Essays*. Oxford University Press.
- McDowell, John (1977) 'On the Sense and Reference of a Proper Name.' Reprinted in his *Meaning, Knowledge and Reality* (1998). Harvard University Press. pp.171-198.
- McDowell, John (1982) 'Criteria, Defeasibility & Knowledge'. *Proceedings of the British Academy*, 455–79.
- McDowell, John (1984) 'De Re Senses'. Reprinted in his *Meaning, Knowledge and Reality* (1998). Harvard University Press. pp.214-227.
- McDowell, John (1986) 'Singular Thought and the Extent of Inner Space'. Reprinted in his *Meaning, Knowledge and Reality* (1998). Harvard University Press. pp.228-259.
- McDowell, John (1987) 'A Plea for Modesty'. Reprinted in his *Meaning, Knowledge and Reality* (1998). Harvard University Press. pp.87-107.
- McGee, Vann (1997) 'How We Learn Mathematical Language'. *Philosophical Review*, 106: 35-68.
- McGinn, Colin (1982) 'Rigid designation and semantic value'. *Philosophical Quarterly*, 32: 97-115
- Merricks, Trenton (2015) *Propositions*. Oxford University Press.
- Miah, Sajahan (2006) Russell's Theory of Perception, 1905-1919. Continuum.
- Michaelson, Eliot and Marga Reimer (2019) 'Reference'. In Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*.
- Montague, Richard (1974) Formal Philosophy: Selected Papers of Richard Montague. Yale University Press.
- Moore, A.W. (ed.) (1993) *Meaning and Reference (Oxford Readings in Philosophy)*. Oxford University Press.
- Mousavian, Seyed N. (2011) 'Gappy propositions?'. Canadian Journal of Philosophy, 41: 125-157.

- Ninan, Dilip (2012) 'Counterfactual attitudes and multi-centered worlds'. Semantics & Pragmatics, 5: 1–57.
- Ninan, Dilip (2013) 'Self-Location and Other-Location'. *Philosophy and Phenomenological Research*, 87: 301-331.
- Peacocke, Christopher (1981) 'Demonstrative Thought and Psychological Explanation.' *Synthese*, 49: 187-217.
- Peacocke, Christopher (1983) Sense and Content. Oxford University Press.
- Peacocke, Christopher (1992) A Study of Concepts. MIT Press.
- Peacocke, Christopher (2008) Truly Understood. Oxford University Press.
- Pears, David (1975) 'Russell's Theories of Memory'. In his *Questions in the Philosophy of Mind*. Duckworth. pp.224–250.
- Pears, David (1981) 'The function of acquaintance in Russell's philosophy'. *Synthese* 46:149-166.
- Pepp, Jessica (2019) 'Principles of Acquaintance'. In Jonathan Knowles and Thomas Raleigh (eds.), *Acquaintance: New Essays*. Oxford University Press.
- Perry, John (2020) 'Singular thoughts'. In In Rachel Goodman, James Genone and Nick Kroll (eds.), *Singular Thought and Mental Files*. Oxford University Press.
- Pinillos, Angel (2011) 'Coreference and meaning'. Philosophical Studies, 154: 301-324.
- Potter, Michael (2008) 'The birth of analytic philosophy'. In Dermot Moran, (ed.), *The Routledge Companion to Twentieth Century Philosophy*. Routledge.
- Potter, Michael (2020) *The Rise of Analytic Philosophy, 1879–1930: From Frege to Ramsey.* Routledge.
- Proops, Ian (2011) 'Russell on substitutivity and the abandonment of propositions'. *Philosophical Review*, 120: 151-205.
- Proops, Ian (2014) 'Russellian Acquaintance Revisited'. *Journal of the History of Philosophy*, 52: 779-811.
- Proops, Ian (2015) 'Certainly, Error and Acquaintance in *The Problems of Philosophy*'. In Donovan Wishon and Bernard Linksy (eds.) *Acquaintance, Knowledge, and Logic: New Essays on Bertrand's Russell's The Problems of Philosophy*. CSLI Publications. pp. 45-63.
- Prosser, Simon (2019) 'Shared modes of presentation'. Mind and Language, 34: 465-482.

- Quine, Willard van Orman (1956) 'Quantifiers and propositional attitudes'. *Journal of Philosophy*, 53:177-187.
- Recanati, François (1993) *Direct Reference: From Language to Thought*. Blackwell Publishing.
- Recanati, François (2010) 'Singular Thought: In Defence of Acquaintance'. In Robin Jeshion (ed.), *New Essays on Singular Thought*. Oxford University Press.
- Recanati, François (2012) Mental Files. Oxford University Press.
- Reimer, Marga (2020) 'Descriptive Names and Singular Thought'. In Rachel Goodman, James Genone and Nick Kroll (eds.), *Singular Thought and Mental Files*. Oxford University Press.
- Robinson, Howard (1994) Perception. Routledge.
- Russell, Bertrand (1903) 'On Meaning and Denotation'. In Alasdair Urquhart (ed.), *The Collected Papers of Bertrand Russell, Volume 4: Foundations of Logic, 1903–05* (1994). Routledge. pp. 324–58.
- Russell, Bertrand (1905) 'On Denoting'. Mind, 14: 479-493.
- Russell, Bertrand (1910) 'Knowledge by acquaintance and knowledge by description'. *Proceedings of the Aristotelian Society*, 11: 108-28.
- Russell, Bertrand (1912) *The Problems of Philosophy*. Oxford University Press. [References to the 1998 edition reprint.]
- Russell, Bertrand (1913a) *Theory of Knowledge: The 1913 Manuscript.* Elizabeth Ramsden Eames (ed.). Routledge. [References to the 1992 edition.]
- Russell, Bertrand (1913b) 'The Nature of Sense-Data: A Reply to Dr. Dawes Hicks'. *Mind*, 22: 75-81.
- Russell, Bertrand (1914). Our Knowledge of the External World: As a Field for Scientific Method in Philosophy. Routledge.
- Russell, Bertrand (1917) 'The Relation of Sense-data to Physics'. In his *Mysticism and Logic*. George Allen and & Unwin Ltd.
- Russell, Bertrand (1918) 'The Philosophy of Logic Atomism'. Reprinted in Russell (1956).
- Russell, Bertrand (1956) *Logic and Knowledge: Essays*, 1901-1950. Robert Charles Marsh (ed.). Unwin Hyman.

- Sainsbury, R.M. (2002) Departing From Frege: Essays in the Philosophy of Language. Routledge.
- Sainsbury, R.M. (2004) 'Referring descriptions'. In Marga Reimer and Anne Bezeidenhout (eds.) *Descriptions and Beyond*. Clarendon Press.
- Sainsbury, R.M. (2005) Reference without Referents. Oxford University Press.
- Sainsbury, Mark (2018) Thinking About Things. Oxford University Press.
- Sainsbury, Mark (2020) 'Varieties of Singularity'. In Rachel Goodman, James Genone and Nick Kroll (eds.), *Singular Thought and Mental Files*. Oxford University Press.
- Sainsbury, Mark and Michael Tye (2012) Seven Puzzles of Thought. Oxford University Press.
- Salmon, Nathan (1986) Frege's Puzzle. MIT Press.
- Salmon, Nathan (2004) 'The good, the bad, and the ugly'. In Marga Reimer and Anne Bezuidenhout (eds.), *Descriptions and Beyond*. Oxford University Press.
- Salmon, Nathan (2014) 'What is Existence?' In Manuel García-Carpintero and Martí Genoveva (eds.) *Empty Representations*. Oxford University Press.
- Sawyer, Sarah (2012) 'Cognitivism: A New Theory of Singular Thought?'. *Mind and Language*, 27: 264-283.
- Schiffer, Stephen (1978) 'The basis of reference'. Erkenntnis, 13: 171-206.
- Schroeter, Laura (2019) 'Two-Dimensional Semantics'. In Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*.
- Siegel, Susanna (2010) The Content of Visual Experience. Oxford University Press.
- Soames, Scott (1987) 'Direct reference, propositional attitudes, and semantic content'. *Philosophical Topics*, 15: 47-87.
- Soames, Scott (2010) Philosophy of Language. Princeton University Press.
- Sorensen, Roy A. (2008) Seeing Dark Things: The Philosophy of Shadows. Oxford University Press.
- Soteriou, Matthew (2013) The Mind's Construction. Oxford University Press.
- Snowdon, Paul F. (1990) 'The Objects of Perceptual Experience'. Proceedings of the Aristotelian Society Supplementary Volume, 64: 121-150.

- Speaks, Jeff (2013) 'Individuating Fregean sense'. *Canadian Journal of Philosophy*, 43: 634-654.
- Stalnaker, Robert (1978) 'Assertion'. Reprinted in his *Context and Content* (1999). Oxford University Press. pp.78-96.
- Stalnaker, Robert (1981) 'Indexical Belief'. Reprinted in his *Context and Content* (1999). Oxford University Press. pp.130-149.
- Stalnaker, Robert (1984) Inquiry. MIT Press.
- Stalnaker, Robert (1987) 'Semantics for Belief'. Reprinted in his *Context and Content* (1999). Oxford University Press. pp.117-129.
- Stalnaker, Robert (1988) 'Belief Attribution and Context'. Reprinted in his *Context and Content* (1999). Oxford University Press. pp.150-166.
- Stalnaker, Robert (1990) 'Narrow Content'. Reprinted in his *Context and Content* (1999). Oxford University Press. pp.194-209.
- Stalnaker, Robert (2009a) Our Knowledge of the Internal World. Oxford University Press.
- Stalnaker, Robert (2009b) 'What is de re belief?'. In Joseph Almog and Paolo Leonardi (eds.), *The Philosophy of David Kaplan*. Oxford University Press. pp.233-245.
- Stalnaker, Robert (2011) *Mere Possibilities: Metaphysical Foundations of Modal Semantics.*Princeton University Press.
- Stanley, Jason (1997) 'Rigidity and content'. In Richard Heck (ed.), *Language, Truth, and Logic*. Oxford University Press.
- Taylor, Kenneth (2010) 'On Singularity'. In Robin Jeshion (ed.), *New Essays on Singular Thought*. Oxford University Press.
- Textor, Mark (1998) 'Rigidity and De Jure Rigidity'. *Teorema: International Journal of Philosophy*, 17: 45-59.
- Thomasson, Amie L. (1999) Fiction and Metaphysics. Cambridge University Press
- Thompson, James (1967) 'Is Existence a Predicate?' In Peter F. Strawson (eds.), *Philosophical Logic (Oxford Readings in Philosophy)*. Oxford University Press.
- Tye, Michael (1995) Ten Problems of Consciousness. MIT Press.
- Walton, Kendall L. (1984) 'Transparent pictures: On the nature of photographic realism'. *Noûs*, 18: 67-72.

- Walton, Kendall L. (1990) Mimesis as Make-Believe: On the Foundations of the Representational Arts. Harvard University Press.
- Wiggins, David (1995) 'The Kant-Russell-Frege View of Existence: Toward the Rehabilitation of the Second-Level View' in Walter Sinott-Armstrong et al. (eds.) *Modality, Morality and Belief: Essays in Honor of Ruth Barcan Marcus.* Cambridge University Press.
- Williamson, Timothy (2000) Knowledge and its Limits. Oxford University Press.
- Wishon, Donovan (2017) 'Russellian Acquaintance and Frege's Puzzle'. *Mind*, 126: 321-370.
- Yablo, Stephen (2014) Aboutness. Princeton University Press.