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Singular Thought: Theory, Content, and Method

By

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DISSERTATION

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Thanks to my family for their unceasing support and encouragement. To all of the mentors that set me on the track to philosophy and nourished my continued engagement. To the philosophy departments of University of Central Florida, University of Florida, and University of California, Davis for their intellectual guidance. To the graduate student body and faculty members in the department of philosophy at University of California, Davis for providing a community in which to thrive. And to my committee members for engaging with my work and aiding the development of my philosophical views.

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Chapter 0

Introduction

This is a dissertation on singular thought that seeks to to do three things; these are distinguished by chapter: Chap. 2 motivates and develops a view of singular thought that is thorouhgoingly grounded in an account of singular content, Chap. 3 provides a heuristic for determining whether a sentence expresses a singular content, and Chap. 4 argues that conceptual engineering is the appropriate methodological framework within which to situate the historical and contemporary development of theories of singular thought. In addition, Chap. 1 sets the stage by providing a comprehensive overview of singular thought from its inception into the contemporary.

0.1 Motivations and Overview

The literature on singular thought stretches back at least to the time of Russell and has become increasingly complex and fragmented. Simply put, *singular thought* is typically taken to be a kind of thought we enjoy that is in some sense *directly* about a particular object or purported object. Singular thought is typically contrasted with *general thought*; general thought is ordinarily understood to be a kind of thought that is about an object indirectly *via* some conceptual condition, such as a property or set of properties the object uniquely satisfies. The dissertation begins in Chap. 1 by providing an extensive, though perhaps not exhaustive, overview on the development of the literature on singular thought and how one may attempt to get a grip on the notion. This includes detailing the views and motivations of Russell, the liberalization of acquaintance constraints, early appeals to mental files, and ends by explicating the most prominent views on singular thought in the contemporary literature: Mental Files Frameworks, Liberalism, and Justificatory Convergence.

This project initially began as an attempt at understanding singular thought in a unified manner that could piece together the various philosophical disciplines involved in the mosaic of its development such that the resulting view would satisfy the concerns of all parties involved in the discussion. Yet, after a long period of time reflecting upon the competing concerns involved in developing a unified theory and the commitments of the theorizers engaged in the discussion, it became clear that a unified theory was, if not out of reach, beyond the scope of a dissertation project.

The last substantive chapter of the dissertation, Chap. 4 addresses the unease felt in attempting to develop a unified theory of singular thought by doing a bit of metaphilosophy. In this chapter we relate the literature on singular thought to the recently popular literature on philosophical methodology concerning *conceptual engineering*. It is argued therein that singular thought should be viewed a theoretical notion in philosophy in the process of being conceptually engineered, as opposed to an ordinary concept that is possessed by the layperson. Moreover, we argue that theorists should shift their attention from the question "what is singular thought?" to the question "how ought we to think of singular thought?" We develop the view that, understood as a project in conceptual engineering, the term 'singular thought' is used equivocally to express a number of distinct notions, each of which may be endorsed independently of one another. These notions are distinguished and we end the chapter with the suggestion that theorists should focus on clarifying the theoretical fruits their favored notion is supposed to bear, and to develop that notion with an eye towards bearing them out.

Since we accept that there are a number of different theoretical notions that are expressed by the use of 'singular thought', we focus the rest of the dissertation on further developing and defending a view of one of these notions that has a historical pedigree. The notion of singular thought we develop and defend is one that treats singular thought as closely wedded to the equally theoretical philosophical notion of *singular content*. A longstanding tradition identifies singular thought with those thoughts that have singular content—contents typically understood as having some object as a constituent. Thoughts with such contents are significant since they are arguably required as theoretical posits to give a complete account of the explanation of intentional action by appeal to folk psychology. However, an often raised objection to singular thought understood as those thoughts with singular contents is that the notion cannot account for thoughts that 'purport' to be about nonexistent objects. Our important contribution to the content based view of singular thought and its theoretical role is that it able to accommodate thoughts concerning nonexistent objects in the explanation of intentional action. Not only that, but we develop an intuitive heuristic that can be used to provide *prima facie* evidence for thinking a sentence content, and by extension a thought content, may be singular in controversial cases.

After the historical overview in Chap. 1, we move to developing our own account of content based singular thought. Instead of attempting to develop a theory that all might find satisfying, we turn our attention to developing a novel account of singular thought that is parasitic on a theory of singular content. Given that our ordinary way of individuating mental states is by appeal to their attitudes and contents, we set out to construct a theory that would respect the laypersons' individuative competencies and develop a theory of singularity of content that vindicates such individuative criteria. This is the theory of the singularity presented in Chap. 2. As with any theory of singular thought, this comes with a variety of theoretical commitments that are dominant in the literature of singular thought; e.g., a commitment to a structured view of propositions. But one important commitment that we elided, which often comes part in parcel with theories of singular thought, is to the nature

of the underlying mental architecture that realizes mental states. The theory on offer ought to be acceptable to those that endorse a either representational theory of mind or some version of interpretationism. In order to achieve this we build more into a theory of content. More specifically, we treat propositional structures as constituents of content over and above the objects and relations that figure into those structures; in addition, these structures are individuated in part by appeal to their relations to other contents or propositions.

Having laid out a theory of singularity of content that attempts to sieve as much theoretical juice out of a theory of content in order to address those issues that orthodox views of singular thought based in content face, we then turn our attention to developing a heuristic for determining when a sentence might express such contents. It is uncontroversial, assuming a referential semantics and structured view of propositions, that simple subject-predicate sentences containing a referential term in subject position express atomic propositions that are singular with respect to the object referred to by the subject expression; for instance "Bertie smokes" is singular with respect to the object referred to by the use of "Bertie". Yet once we move beyond such simple constructions, it becomes more controversial whether a singular content is expressed by some sentence. For instance, does "Bertie's pipe is wooden" express a singular content? Many might think so, but this will depend on the appropriate semantical analysis of the sentence.

In Chap. 3 we develop an analyticity heuristic that informs us whether a sentence expresses a singular content by considering the sorts of analytic entailments had by the sentence. The hope is that using an analyticity heuristic to defeasibly determine whether a sentence expresses a singular content will allow us to identify which sentences express singular contents without committing to a particularly robust semantic analysis of the sentence itself. And so we may circumvent discussions regarding how sentences ought to be analyzed in order to determine whether their contents are singular. If one accepts that the content of a thought (understood as a mental state) is just the content expressed by the sentence embedded in the *that*-clause used when making a thought attribution or a report, then we will be able to say

not only when certain controversial sentences express singular contents, but when thought attributions attribute singular thoughts that are equally controversial.¹

Last, after Chap. 4, we offer a very brief summarization of the dissertation in total in a conclusion section.

¹That is to say, the content of the thought attributed when uttering "Ludwig believes that Bertie's pipe is wooden" may be read off the content of the embedded sentence "Bertie's pipe is wooden." And so, if the belief attribution is true, Bertie's belief content will be identical to the content of the embedded sentence.

Chapter 1

Historical Overview of Singular Thought

Introductory Remarks

Presenting the notion of singular thought [ST] to a general audience is rather difficult. One is hard pressed to provide a general philosophical analysis of ST that does not commit to some feature that is controvertible; unfortunately, there is no *obvious* neutral way of characterizing ST. In order to provide a general introduction to ST, the goal of this chapter will be to tackle two tasks simultaneously. One task is to motivate, disentangle, and clarify the various points of contention faced when giving an analysis of ST. The other task is to provide an overview of the historical foundations that introduced ST into the philosophical corpus; concurrently highlighting the theoretical importance of ST.

The chapter proceeds as follow. In §1.1 we attempt at a first pass characterization of ST that considers how one might attempt to give an analysis of ST by drawing on two analytic methods that are often deployed for theorizing about some concept: (i) developing a characterization of a concept by identifying the properties that unify members of its extension and defining the concept as that which applies to things with such properties and

(ii) characterizing some complex concept by analyzing its constituent concepts. The goal in \$1.1 is to illustrate the difficulty of providing a neutral analysis of ST and to simultaneously identify different points of contention in providing a characterization of ST.

After our first pass characterization of ST in §1.1, we then consider the classical analytic roots of ST in §1.2. This involves developing the view that Russell held that serves as the launching point for many of the contemporary discussions and points of contention concerning ST. We shall also consider the transcendental argument put forward by Strawson that motivates us to think that the existence of ST (or at minimum *singular content*) is necessary in order to explain certain mental or linguistic capacities we enjoy.

Following on the discussion of Russellian ST, in §1.3 we explore how the Russellian notion was challenged, developed, and deployed in analytic (or post-analytic) philosophy from the early 1970s to the early 2000s.

The final portion of the chapter, \$1.4, discusses contemporary views of ST that push further away from the classical Russellian view and its late analytic offspring, that is, from the mid 2000s until today.

1.1 Singular Thought, First Pass

To provide a first pass characterization of ST we shall consider two methodological strategies for developing a philosophical account of a concept. It might be helpful to think of the first approach we consider as something like a *bottom-up* strategy, and the second approach as a *top-down* strategy. The *bottom-up* strategy is to proceed by way of considering representative examples of ST and attempt to abstract a partial or complete list of necessary and sufficient conditions for the presence of ST. The *top-down* strategy is to attempt to analyze the constituent expressions 'singular' and 'thought' by appeal to how they may be typically understood, and then intersect the analyses of each notion to arrive at a general characterization of ST. Although these approaches are not claimed to be exhaustive strategies for analyzing some concept, we shall use them to illustrate the difficult of characterizing ST and to draw attention to the various properties that are often at dispute when theorists discuss ST. Following that, we shall consider a list of properties, or 'markers', typically used to identify ST that are discussed by Sainsbury [120] to set the stage for points of contention in the development of ST from early analytic philosophy and into the contemporary literature.

1.1.1 Getting a Grasp, The Bottom-Up Approach

Oftentimes when it is challenging to provide a neutral characterization to introduce a phenomenon of interest, theorists resort to identifying agreed upon members of the extension of the concept to approach theorizing concerning it; ultimately with a view towards generating a set of features that uniquely unifies the members of its extension and which constitutes the analysis of the concept. This is the first approach we consider and refer to it as the *bottom-up* strategy for conceptual analysis. Accordingly, ST is often introduced by way of considering representative canonical examples of thought that most theorists classify as singular. For instance, Jeshion [65] appeals to the following examples:

- 1. Thinking the tallest yellow rose in the garden is lovely.
- 2. Thinking *that* is lovely. (Whilst attending to the rose.)

The sentence in (1), it is claimed, expresses a thought that picks out the rose *via* some *general* conceptualization of the rose—*via* the object falling under the concept THE TALLEST YELLOW ROSE IN THE GARDEN—and thereby one entertains a *non-singular* thought when one conceptualizes the rose in their thought in that way. Whereas the sentence in (2) refers deictically to the object attended to—namely, the rose—owing to the referential function of the indexical expression 'that', and thereby one entertains a *singular* thought when the rose is thought of in a similar fashion.

Of course, even though the above examples serve to introduce ST by way of introducing some plausibly *incontrovertible* example of it, there appears to be no unified agreement as to why (2) counts as an instance of ST but (1) does not. To illustrate this point, let's consider a potential analysis of ST. Keep in mind this is merely a toy-analysis intended to illustrate the difficulty of developing a theory of ST by appeal to the *bottom-up* strategy; if we were serious in developing an account by deploying this strategy, we would have to consider many other purported members of the extension of the concept ST.

In many cases, as in (2), purported examples of ST are expressed using sentences containing referential expressions. These are often contrasted with examples of thought regarded as non-singular and are expressed using sentences lacking referential expressions, as in (1). Although the presence of referential expressions in sentences expressing a thought may be a relatively reliable *guide* for identifying whether the corresponding thought expressed is singular, many would argue this condition is neither necessary nor sufficient for singularity. Call a complete analysis of ST appealing to this condition *referentiality* (*REF*):

A thought is singular *if and only if* the sentence that is used*REF*: to correctly report (or attribute) the thought contains areferential expression.

If referentiality were both necessary and sufficient, there would be little dispute as to what counts as a ST; the issue of characterizing ST would resolve into the issue of determining which expressions are referential and hunting for reports or attributions of thought that contain such expressions. Since the issue of characterizing ST does not resolve into a hunt for reports of thought containing referential expressions, it is evident most theorists do not think the presence of referential expressions within thought reports is necessary and sufficient for singularity of thought.

Although *referentiality* may be too strong of a claim, we can consider whether the left to right or the right to left direction of the biconditional offers a partial analysis of ST, i.e.,

whether referentiality should be reinterpreted as merely a necessary condition (REF_n) or as merely a sufficient condition (REF_s) , respectively:

If a thought is singular, then the sentence that is used

 REF_n : to correctly report (or attribute) the thought contains a referential expression.

If the sentence that is used to correctly report (or attribute)

 REF_s : a thought contains a referential expression, then the thought is singular.

Yet theorists argue there are examples of ST that serve as counterexamples to both of these claims.

For potential a counterexample to REF_n consider Donnellan [28] style examples where a speaker purportedly uses a description *sans* referential expressions in order to refer. Consider an example adopted from Donellan. While at a party, you utter the following sentence to friend.

3. The man drinking the martini in the corner is intoxicated.

According to Donellan, you have used the description 'the man drinking the martini in the corner' to refer to that individual that is in the corner. And the corresponding belief you would be said to have reported is one whose truth conditions are not fixed by the description, but depend on the individual to which you purportedly referred. If Donellan's position is correct, and you have indeed referred, then you have expressed a ST concerning the man, but which was correctly expressed without using a referential expression; this undermines REF_n .¹

For a potential counterexample to REF_s consider attributions of a thought to a subject using a referential expression for the individual the thought is about but in which the subject

¹We are assuming here that the contents of your beliefs may be read off the contents of sentences you sincerely utter without linguistic ignorance.

having the thought is not in a position to refer to relevant subject. For example, suppose your friend named Lucretia, unaware you have any pets, says to you "All cats, and I do mean *all cats*, are evil creatures." Later, you return to your residence and say to your cat,

4. Lucretia thinks you are an evil creature.

In this case, REF_s entails that you have attributed a ST to Lucretia; if you have spoken truly as ordinary language dictates, then Lucretia has a ST concerning your cat. Yet, many would object that Lucretia is in no position to entertain a ST about your cat, for Lucretia is in no position to refer to your cat.

We have introduced referentiality and its restricted adaptations to illustrate two points. The first is that some feature that may be prima facie constitutive of a complete or partial analysis of ST based upon its frequent presence in representative samples of the concept's extension faces plausible, albeit theory laden, challenges; so we should be wary of imprudently characterizing ST by overt features of sentences that denote agreed upon members of its extension. The second is to highlight the complicated interplay between attitude attributions, understood as uses of sentences on particular occasions that contain attitudinal expressions, and the nature of the thoughts that they report.

Here we elaborate on this second point. For it is important to recognize that the sentences introduced to theorize about the properties of ST are not *themselves* instances of thoughts, but rather that which they are purported to denote; i.e., the sentence in (2) is not itself an instance of ST but rather its denotation is an instance of ST. At this point one may object that the toy *bottom-up* analyses provided in REF, REF_n , and REF_s have gone astray since they have not proceeded by way of generalizing over features of members of the extension of ST but by generalizing over features of *sentences* that are taken to denote members of the extension of ST. This is an important objection if one takes seriously the view that our philosophical analyses should not place such strong emphasis on language. However, we find value in what is often called *language-first* philosophical analysis and shoulder the presumption that our primary means of analyzing concepts is *via* language; this is especially so when mental concepts are the object of analysis since mental phenomena are not overtly observable. This is not to say that we should or must rely upon analyses of mental concepts that characterize mental phenomena in terms of properties of linguistic entities that denote the phenomena, but rather that linguistic evidence is one of our primary sources of evidence for acquiring knowledge of our commitments concerning the nature of mental phenomena.

If we are both *realists* about the mental, and committed to the unobservability of mental phenomena *per se* then our analyses of concepts that pick out these phenomena cannot proceed directly by identifying their occurrences in observation, but indirectly through whatever means we have of getting a grip on their occurrences; in this case we claim that one (if not *the*) primary medium in virtue of which we gain access to the occurrence and nature of mental phenomena, that is, language. And so, while we should be wary of characterizing our analyses of ST (or other mental concepts) *entirely* in terms of generalizations over properties of natural language sentences or other linguistic entities used to denote such entities, we may use properties of linguistic entities that are distinctively related to the presence of ST in order to arrive at, at most, partial analyses of ST (e.g., as that mental phenomenon which is denoted by attitude reports and attributions with such linguistic hallmarks) or in the development of heuristic guides for identifying the presence of ST.

Although we argue that REF etc. are mistaken, this is not because they analyze something that is mental in terms of something that is wholly linguistic; in fact they don't, they provide analyzes of ST in terms of the relationship between linguistic entities and that which they denote. We do not take a stance on whether the failure of these analyses stems, in part, from targeting the wrong phenomenon, but commit to their failure as the result of running roughshod over the different ways in which ST may be related to language.

1.1.2 Getting a Grasp, The *Top-Down* Approach

Setting aside REF and its ilk, and the *bottom-up* approach altogether, we might attempt a different route for arriving at an analysis of ST. Instead of approaching an analysis of ST by appealing to agreed upon members of its extension and hunting for some unifying feature(s) among them, we may instead approach analyzing it by considering the *kind* of thing theorists agree it must be by directly analyzing the complex linguistic expression 'singular thought'. Call this the *top-down* strategy.

To execute the *top-down* strategy, we begin by breaking down the expression 'singular thought' to its constituent expressions, 'singular' and 'thought'. Given that 'singular' is an adjectival modifier of 'thought', there are two ways to proceed. One way is by attempting at providing a neutral analysis of thought and an independent neutral analysis of singular such that their analyses permit combinability in a way that supplies a neutral account of ST.² This approach does not recommend itself in this case because there is no intuitive property denoted by 'singularity' that recommends itself to the analysis. What singularity is with respect to thought is precisely what is at dispute in many discussions concerning ST.

A second way to proceed that appears more faithful to the literature on ST, is to first attempt at giving an analysis of *thought* and then specifying which property *singularity* is by extending the analysis. That is to say, the property of *singularity* will be parasitic on our account of *thought*. What features of thought suffice for being singular are ultimately determined by the features that thoughts enjoy in virtue of being thoughts. It is noteworthy at the outset that there are immediate choice points concerning an analysis of thought that theorists dispute; these disputes over the nature of thought explain why there are disputes over the nature of singularity. If the property of singularity as applied to thought is parasitic on an account of the nature of thought, then we should expect to see different accounts of

²The *combinability* of analyses is left here to be an intuitive notion wherein the analyses must treat the constituent expressions in such a way that they can be semantically combined to result in an expression with a complex meaning; e.g., the concepts GOLD and MOUNTAIN are combinable but the concepts COLORLESS and GREEN are not combinable.

singular thought clustered around different accounts of the metaphysics of thought itself; as a matter of fact, we do.

Let's begin by considering how far a neutral analysis of 'thought' can be taken. The goal is to show that providing a neutral account of the nature of thought cannot be taken very far. The payoff will be to set the stage for exploring different accounts of the nature of *singularity* that highlights the underlying metaphysical commitments of the nature of thought they require.

It is apparent that all parties to the discussion agree that 'thought' must denote a kind of mental state³; more precisely, an *intentional* mental state.⁴ However, establishing this much makes minimal headway into giving a complete account of the nature of thought. Which states of an individual count as *mental* states is an active controversy within the philosophy of mind, and this dispute is often parasitic on which states ought to count as being *genuinely* intentional, as opposed to merely being treated as such for practical purposes, for instance. Although not many would fully endorse Brentano's[13] influential thesis that intentionality is *the* mark of the mental, many would still endorse the weaker thesis that intentionality is a mark of the mental; where the indefinite is read as introducing the having of intentionality as a sufficient condition for mentality.

Regarding thought as a kind of intentional mental state introduces to the fold two further questions: (i) what is required for some state to be *intentional*? and (ii) what distinguishes *thought* from other kinds of intentional mental states?⁵ Attempting to fully address these questions would carry us much to far afield for our present purposes, so we must be content with gesturing at the general sorts of positions that have been endorsed; just to get a flavor

³There is also the common use of the expression 'thought' to mean Fregean thought or Fregean content. This is not how 'thought' in 'singular thought' ought to be read. We shall use 'thought' to pick out a kind of intentional state and will use 'Fregean thought' or 'Fregean content' if we intend to be discussing Fregean propositional contents. This ambiguity runs rampant in the literature for two plausible reasons (i) ST has content and (ii) one popular analysis of ST is in terms of their contents

⁴This specification is important if we make the plausible assumption that there are non-intentional mental states; e.g., the *feeling of a pain*. Moreover, our attention is restricted to those intentional states that may be characterized in terms of propositional contents; so we set asides states such as *fearing God* or *loathing Socrates*.

⁵For example, *belief*, *desire*, etc.

for the complexity of the positions one might take up. Let's begin with (i), what is required for some state to be *intentional*?

There are at least three common responses to (i) that philosophers of mind have defended:

REP: A state is intentional *if and only if* it is representational.

CON: A state is intentional *if and only if* it is phenomenally $_{6}$ conscious.

ACC: A state is intentional *if and only if* it is accessible to phenomenal consciousness.

Those with naturalistic leanings largely endorse something in the realm of REP and those without naturalistic leanings may go for either CON or ACC. One might also opt for a combined view:

A state is intentional *if and only if* it is

ACC-REP: representational and accessible to phenomenal ⁷ consciousness.

Without getting into the weeds, it ought to be clear that introducing these different simplistic characterizations of the nature of intentional states serve also to introduce further notions that requires analysis; in particular the notions of representation, phenomenal consciousness, and accessible to phenomenal consciousness.⁸ Some theorists contend that ST ought to be understood as essentially related to consciously occurrent *episodes* of thinking—as *CONC* requires. While others are happy to allow ST be non-occurroent dispositional states—as permitted by either *REP* or *ACC*.

⁶For a view according to which *thought* is essentially conscious, see Crane [20].

⁷For views in which intentional states must be accessible to consciousness, see Searle [124] and further work on the *connection principle*, Fodor and Lepore [43] and Ludwig [86].

⁸One might also attempt to characterize intentional phenomena partly by appeal to their being *personal-level* states rather than *subpersonal-level* states. See Drayson [31] for considerations concerning the personal / subpersonal distinction.

How to precisely understand the nature of intentional states directs us into some of the foundational issues within philosophy of mind that a neutral theory of ST should not answer, but that a neutral theory may provide constraints for; albeit having waded too far into deep waters, we must turn back. As we shall see later, theorizing concerning ST has in fact been partly driven by theorists' more fundamental commitments concerning the metaphysics of mind, such as their general commitments concerning the nature of intentional states and their realization in physical systems.

Let's now briefly consider (ii), what distinguishes *thought* from other intentional states? One way to distinguish thought from other intentional states is to treat it is as on a par with them, though functionally or causally discrete. For example, one may believe that the sky is falling, desire that the sky is falling, or think that the sky is falling. Here thought is treated as a species of the genus intentional attitude along with belief, desire, and so on. Instead one may treat *thought* as a genus that has as its species various mental state kinds. For example, believing that the sky is falling and fearing that the sky is falling may both be understood as instances of the kind thinking that the sky is falling.

Much less plausibly hangs on this distinction given in response to (ii) than the distinctions made in responses given to (i), however one might wish to combine responses to (i) and (ii) to generate nuanced views. Consider the following: adopt the view that thought is genus of the species intentional attitude, additionally treat belief, desire, and certain other intentional attitudes as being intentional in virtue of ACC; what distinguishes thought from these other intentional states is that it is essentially conscious, i.e., it requires CON. This delivers a nuanced view in which certain intentional state kinds are individuated from others not in virtue of their functional or causal discreteness, but in virtue of their relationship to consciousness. Why endorse such a view? Well if thought and belief are genuses of the same species, it is difficult to see what the causal or functional difference would be between thinking that P and believing that P. But if thought is treated as essentially conscious and belief is not, then we can distinguish them on the basis of thoughts being instances of belief that are phenomenally conscious.

So far we have only entertained a top-down approach to analyzing one of the constituent expressions of 'singular thought', namely 'thought'. We hope to have illustrated that providing a neutral account of ST proceeding in this fashion appears exceedingly difficult, as it quickly results in attempting to determine answers to questions more fundamental than the nature of ST itself. But what of the property of singularity? As suggested, the property of singularity is often understood on the basis of the nature of thought. In the next section, different markers of singularity are considered that have been used to characterize and identify the property of singularity as it relates to thought. It is argued that many of these markers ground out in disputes over the metaphysics of thought itself, suggesting that theorists' metaphysics of mind often plays a pivotal role in their understanding singular thought.

1.1.3 Markers of Singular Thought

In this section we pursue the question of what the property of singularity is by considering different markers of singularity that theorists have endorsed. It is argued here that these markers often commit theorists to some metaphysics of mind or other. Additionally, it is useful to briefly consider the markers that different theorists have taken to be indicative or constitutive of ST so that we may track commitments to features of ST, as theories of it have changed over time, when presenting the historical development of ST beginning in §2.

The cast of markers to be considered are specified by Sainsbury [120]. Disagreement over which markers are taken to be constitutive of ST has left some to reject that there is a unified and theoretically interesting notion in play.⁹ Instead of adopting such a position rejecting ST, it is arguable that there are some theoretically useful notions of ST even if they do not form a unified category. Questions concerning these views are to be set aside for now. Reproduced exactly as presented in Sainsbury [120, p.22–23], the markers are as

⁹See Hawthorne and Manley [57].

follows.

- i *Name-like-syntax* The thought has as a syntactic constituent a simple nominative concept that refers (or purports to refer to) a particular.
- ii *Directness* The thought is about an object in virtue of an unmediated relation, i.e., a relation that does not depend on satisfaction conditions.
- iii *Object-involving* The thought has object-involving truth conditions, i.e., for some object x, and every wold w, the truth at w of the thought depends on how things are with x.
- iv Acquaintance The thought is based on an acquaintance relation with some object.
- v *Object-dependent* The thought is such that, for some relevant object, it could not exist if the object did not.
- vi *Knows-wh* The thought is such that, the agent that has the thought has some individuating knowledge of the object the thought is singular with respect to.
- vii *De-re-report* The thought may be properly reported or attributed using *de re* attitude ascriptions.

As discussion proceeds, tables will be used to represent the overall packaging of markers that theorists endorse.¹⁰

As noted by Sainsbury, the traditional view of singular thought we inherit from Russell may be loosely understood as the packaging of marks (i)-(vi); although, the evidence for Russell's commitment to (i) is unclear, so we leave it open for further exploration. We explore Russell's characterization of ST in the next section, but for illustration, we can represent the traditional Russellian view with the following table:

¹⁰The complete list of the tables in this chapter may be found in the appendix.

Russellian ST		
i	Name-like-syntax	\checkmark
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	\checkmark
v	Object-dependent	\checkmark
vi	Know-wh	\checkmark
vii	De-re-report	×
Table 1		

Additionally, we may represent the view that will argue for in Chap. 2 with the following table.

	Content Based ST	
i	Name-like-syntax	×
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	×
v	Object-dependent	×
vi	Know-wh	X
vii	De-re-report	×

For now, the packaged views will be set aside and we shall consider how the different markers may constrain our metaphysics of mind and how the markers are related to one another. The bare-bones analysis of *thought* presented in §1.1.2 treats it as an intentional mental state; that shall be assumed here. The question becomes, if we assume some marker is constitutive of ST, what does that entail about our metaphysics of mind? Each marker shall be considered in turn.

(i) Name-like-syntax—Suppose that having a name-like-syntax is constitutive of a thought's singularity. Depending on how we understand what 'syntactic constituents' of thought are, (i) has some plausible yet controversial consequences. One way to understand the syntactic constituents of thought is in terms of the logical structure of the sentence used to correctly attribute a thought. In this case, having a name-like-syntax would resolve in there being a term that refers to an in individual that is among the constituents of the logical structure of the sentence under analysis.¹¹ Yet, perhaps the most obvious way to understand thought as having syntactic constituents is in terms of the Language of Thought Hypothesis (LoTH) as endorsed by Fodor [40] and many others; in such a case, having a name-like-syntax maps more closely to the overt grammatical structure of a sentence. If understood in this way, then commitment to (i) seems to straightforwardly commit a theorist to some version of the representational theory of mind (RTM), where mental states are understood to be realized by some internal representations of a system.¹² Although there are a variety of compelling arguments in favor of RTM (in particular, of the LoTH variety) and it enjoys much widespread rapport among philosophers of mind, it is not the only position available. One may instead opt for some kind of *interpretationism* about mental states, à la Dennett [26], or opt to leave it open what the internal realizers of mental states must be.¹³ So, commitment to (i) understood as such entails a controversial metaphysics of mind. Additionally, it is not obvious that (i) entails any of the other markers.¹⁴

(ii) *Directness*—Consider now the supposition that commitment to *directness* is constitutive of *ST*. This commitment entails, at least, that thoughts are *about* objects in two ways: satisfactionally and non-satisfactionally. Thoughts that *directly* concern their objects are

¹¹However, one may also opt for a *predicativist* view about names in which names are revealed to be predicates under analysis. In such a case, having a name-like-syntax as revealed by the analysis would not seemingly give us any insight into singularity. See, Fara [34] and Jeshion [68] for predicativist options.

¹²Of course whether the *content* of such states are wholly determined by internal features is controversial. ¹³One might think that the internal cognitive architecture is representational but *connectionist* in nature rather than *language-like*, such as Churchland [19], or that the internal realizers of mental states are of some yet unimagined structure.

¹⁴Sainsbury [120, p.24] illustrates the lack of entailment from (i) to the other markers by considering the thought that Pegasus flies.

non-satisfactional. For those that are proponents of something like purely descriptive theories of thought content, this is a controversial assumption. However, many theorists reject the claim that all thought content is purely satisfactional. When the historical development of ST is considered it will be discussed how something like *directness* is a motivating feature for the introduction of ST in early theories of it.¹⁵ Concerning the other markers, *directness* plausibly entails the markers: (iii) *object-involving*, (iv) *acquaintance*, (v) *object-dependent*, and (vi) *know-wh*. Of these markers, it is difficult to deny that *object-involving* is entailed by *directness*. If some thought involves an unmediated aboutness relation to an object, then presumably that object makes some contribution to the truth conditions of the thought. Whether *directness* entails *object-dependent*, *acquaintance*, or *know-wh* will depend on how the markers are further analyzed. For instance, if acquaintance is taken to be the only unmediated aboutness relation and one that provides individuating knowledge of its object, directness will entail *object-dependent*, *acquaintance* and *know-wh*.

(iii) Object-involving—The commitment of being object-involving appears tightly connected to directness. In fact, it is difficult to see how a states being directly about some object could fail to have that object involved in its truth conditions in the way specified. So, (ii) appears to entail (iii), but not vice versa. For consider a case of a thought that would be appropriately described using a rigidified definite description. Such a thought would clearly be object-involving with respect to the object the definite description denotes (supposing there is one), but such a thought would still be about the object in virtue of its satisfaction conditions. So, although (iii) also appears to be a traditional motivation of the introduction of ST, it is largely accounted for by being entailed by (ii). Regarding the metaphysics of mind, it is not obvious that commitment to object-involving truth conditions reveals any strong commitments. In so far as thought is regarded as an intentional state, and thereby essentially a state that has aboutness conditions, it is not very controversial to posit that the aboutness of a thought is to be characterized at least partially in terms of its truth con-

 $^{^{15}}$ This is demonstrated by the Strawsonian transcendental argument to be considered in §1.2.3.

ditions. Moreover, the objects to which the thought would ordinarily be understood to be about would be those that feature into its truth conditions. Although there do appear to be mental states (that we have set aside) that are instances of ST that don't straightforwardly count as truth-conditional by way of failing to be propositional. Thus one might wish to restrict the object-involving condition to mental states with truth-conditional contents. It is not obvious that *object-involving* entails any other markers.

(iv) Acquaintance—Commitment to acquaintance is one that is widely discussed in the contemporary literature. Yet, the extent to which commitment to acquaintance requires a particular metaphysics of mind will be a function of how the relation is itself understood. Some theorists endorse simple causal accounts whereby some kind of causal contact with an object is required in order to have STs concerning that object. This requirement does not place any stringent condition on a metaphysics of mind outside of causal contact on an object, which in many cases is innocuous. A traditional Russellian version of acquaintance requires indubitability of the existence of the object of acquaintance. This is more controversial, in that one would be committed to at least two fundamentally different epistemic ways to be in contact with objects (acquaintance and description). Moreover, the indubitability constraint places rather stringent conditions on what kinds of objects can be thought of directly; not many endorse a traditional Russellian version of acquaintance and opt for some weaker epistemic relation required for acquaintance with an object. Under many specifications, commitment to acquaintance seems to entail (ii) directness and by transitivity (v) objectdependent and (iv) object-involving. The take away is that, absent a proper specification of the acquaintance relation, not much can be read into the metaphysics of mind from endorsing this constraint.

(v) Object-dependent—This condition is often challenged as one that could be constitutive of singularity on the basis of purported ST about objects that don't exist. Perhaps thoughts about fictional entities, mythological entities, or failed scientific stipulations. In any case, the *object-dependent* condition does commit one to a theory of intentional states that requires their aboutness conditions be dependent on the existence of worldy objects, which, when combined with further plausible commitments, speaks in favor of a minimal kind of externalism about thought content and against a full-blooded internalism. Given that the internalist versus externalist dispute about the nature of thought content is a central dispute within the metaphysics of mind, this commitment reveals at least a minimal metaphysical restriction on the nature of thought. If one posits that at least some thoughts contents are object-dependent, then radical Cartesian scenarios modeled on our everyday mental lives are not possible; that is to say, one could not occupy the skeptical scenario invoking evil demons and have all of the same thoughts as the individual that does not occupy the skeptical scenario.¹⁶

(vi) Know-wh—The know-wh condition requires that subjects possess some form of individuating knowledge of an object in order to have some ST concerning it.¹⁷ This condition may often be understood as an extension of *acquaintance* for it is clear that some ways of specifying the acquaintance relation either entail or are equivalent to the possession of individuating knowledge. Such a condition does not say much about the metaphysics of mind apart from epistemic conditions required for the having of certain thoughts; this makes the nature of a certain class of thoughts tightly connected to epistemic constraints. Although the know-wh constraint has seen support historically, it has largely fallen out of fashion with the weakening, or rejection entirely, of *acquaintance*. Similarly to acquaintance, if endorsed, *know-wh* must be further specified to determine which other marks it entails.

(vii) *De-re-report*—We might treat this condition as on a par with *REF* and its kin discussed in §1.1, that is, given a particular semantic understanding of the category of *de re* reports.¹⁸ The metaphysics of mind, with respect to *SL*, would then appropriately targeted

¹⁶One may also react in favor of Cartesian intuition that we may have all of our currents thoughts in a Cartesian skeptical scenario and reject object-dependence as a condition. Ludwig [87] develops a position of ST in favor of this intuition that treats ST as a species of de se thought.

 $^{^{17}}$ Know-wh may be short for a multiplicity of different kinds of knowledge—know-which, know-who, or know-what.

¹⁸What features constitute a *de re* report is a vexed discussion and make the waters here ever so murky. Unfortunately the expression 'singular thought' and 'de re thought' are often used interchangeably. Such use is misleading and appeal to the *de re* in the discussion of SL may be best avoided altogether. The relation

by analysis of a certain class of linguistic expressions. As discussed, some would deny that linguistic analysis is revealing of the nature of mind, but the primary issue for *de-re-report* is dispute over what class of linguistic expressions are in the extension of *de re* reports. So, whether (vii) is a marker of singularity depends upon specifying the relevant class of linguistic expression that constitute *de re* reports which is itself controversial. Although Sainsbury [120, p.24] notes that *de-re-report* does not plausibly entail any other markers, this depends on how the notion of *de re* reports is to be analyzed; the analysis of the *de re* is explored further in §1.2.2.

Do commitments to different conditions on singularity commit one to a controversial metaphysics of mind? We claim that this is plausibly so; especially in the cases of commitments to (i), (ii), and (iv), which enjoy the most support among theorists, with the caveat that their controversial metaphysical entailments depend on how these commitments are unpacked. Likewise, the extent to which the markers entail one another often depends on how they are analyzed. Some of the markers discussed are better understood as resulting in controversial epistemic commitments, but given that such commitments will also constrain the thoughts subjects may enjoy, they may be understood as indirectly placing constraints on the nature of thought itself; i.e., some thoughts are such that they require special relations to things in the world. Arguably commitment to *name-like-syntax* has the most direct effect on what the nature of thought must be like if it is constitutive (partially or wholly) of the property of singularity. As we shall see, this commitment is especially prevalent in contemporary views of SL that attempt to analyze them in terms of *mental files*. Characterizing ST by appeal to name-like-syntax, vis-á-vis internal vehicles that realize thought, we think is uniquely problematic given that it rules out views about the nature of thought that do not treat it as realized by some *language-like* cognitive architecture.

Having given an introduction into analyzing SL and conditions on singularity, we hope to have illustrated the difficulty in providing a neutral analysis of the phenomenon at hand. between the de re / de dicto distinction and ST will be discussed in §2.2. Whether discussing the nature of thought itself, or the property of singularity, there is no obvious way to state precisely what theorists take ST to be in such a way that it could be used to guide an impartial analysis into the phenomenon. We thus turn to the historical development of ST to elucidate specifically how the notion was introduced into philosophical discourse and how it has developed over time owing to distinctive theoretical pressures.

1.2 Analytic Antiquity

1.2.1 Russellian Roots

As with many technical notions in analytic philosophy, the root of the discussion concerning ST is often traced to Bertrand Russell¹⁹; this is reflected in the few introductions found in anthologies dedicated to discussing ST.²⁰ The traditional Russellian notion of ST, as represented in *Table 1*, is generated out of a number of specific commitments Russell held within the philosophy of language, epistemology, and metaphysics. In particular, Russell held a conjunction of views we shall label *Russellian Thought* that consists of the following four claims: *Russellian structured propositions* (*RSP*), *referentiality of logically proper names* (*LPN*), *Russellian propositional entertainment* (*PET*), and *Russellian acquaintance* (*ACQ*).

- RSP: Propositions are structured entities constituted by objects and properties.
- *LPN*: The semantic role of a logically proper name is to contribute the object to which it refers.
- PET: Entertaining a proposition requires acquaintance with the constituents of the proposition.

¹⁹The relevant works from Russell are [113], [114], [115], and [116].

²⁰For example the introductory pieces by Goodman and Genone [49] and Jeshion [65]. Although we begin our historical overview with Russell as well, it has been argued that ST may also be traced as far back as the works of Kant[54] or even Ockham[97].

ACQ: Acquaintance with some object or property requires direct awareness of the object or property.

Given these commitments of Russell, we are able to straightforwardly determine how the commitments of Russellian ST fall out. That is, we can determine how Russell is committed to the following features as constitutive of ST: (ii) directness, (iii) object-involving, (iv) acquaintance, (v) object-dependent, and (vi) know-wh. We shall set aside detailed discussion of whether Russell is committed to (i)name-like-syntax since it will take us far afield. Suffice it to say, whether Russell was committed to (i) depends on how he understood the relationship between thought and language. Oftentimes Russell made inferences about thought on the basis of linguistic analysis, suggesting his treatment of the structure of thought was isomorphic to the structure of language under appropriate logical analysis. Such a treatment of Russell makes plausible his commitment to (i).

Let us begin by unpacking RSP. The *content* of an intentional state is that which it is about. For simplicity, we narrow our attention to the class of intentional states known as *propositional attitude states*, i.e., those states in which the content is correctly characterized by appeal to a *proposition*. Russell was committed to a particular metaphysical characterization of propositions captured brusquely by RSP.²¹ RSP may be leveraged to draw a metaphysical distinction between two sorts of propositions that Russell is committed to: *general propositions* and *singular propositions*. General propositions are those that only contain properties as constituents; singular propositions are those that contain at least one object as constituent.

The distinction between general propositions and singular propositions is what generates the core of the distinction between non-singular (or general) thought on Russell's account of ST; what fundamentally distinguishes a thought as singular from non-singular is parasitic on

 $^{^{21}}$ Of course, one might opt for a different specification of the nature of propositions as either *other* sorts of structured entities, e.g., collection of Fregean senses, structured intensions (Cresswell [22]), or algebraic approaches (Zalta [137]); instead one may also endorse a view according to which propositions are unstructured entities, e.g., sets of possible worlds.

the propositional content of the thought. Non-singular thoughts have general propositions as their contents; they are non-singular in the sense that they only contain properties as constituents of their contents. A ST has a singular proposition as its content; the thought contains at least one object as a constituent of its propositional content. Thus, the *singularity* of ST is constituted by the fact that the content of the thought contains an object as opposed to merely properties. This introduces a class of theories of ST that we label *content views* of ST. Content views are those that ground the singularity of ST in some feature of the propositional content of the thought. Non-content views of ST ground singularity in some feature of the thought other than some feature of its content.

Conjoining RSP with LPN, while eschewing Russellian complications, the meaning of the sentence "Ube is a cat" may be represented as a structured set containing the object referred to by 'Ube' and the property of *being a cat*:

$$\langle \langle u \rangle, C \rangle$$

Where u is Ube and C is the property of *being a cat*. Given that some particular, in this case Ube, is a constituent of the proposition expressed by an utterance of the sentence "Ube is a cat", this sentence expresses a singular proposition.²² Likewise, if we wanted to represent the content of the thought entertained when thinking that *Ube is a cat*, we would use the same set. So by extension the thought itself will be singular.

Russell's commitment to *RSP* and *LPN* entail his commitment to *directness*, *object-involving* and *object-dependent*. *Directness* and *object-dependent* follow from the stipulation that a singular propositional content contains the object it is singular with respect to as a constituent; and, as noted in §1.1.3, *directness* entails *object-involving*.

This appears to be a fairly complete metaphysical picture of what constitutes a singular thought, however, PET and ACQ provide further epistemic constraints that Russell is committed to which determine what is required to have a *any* thought; and particular con-

 $^{^{22}}$ A more detailed discussion of the nature of structured propositions can be found in the *Stanford Ency*clopedia of *Philosophy* entry by King [79].

straints on what is required to have a thought with a singular proposition as its content. *PET* provides epistemic constraints on entertaining propositions. In order to understand the proposition expressed by the sentence "Ube is a cat", and to have the corresponding thought with that content, it is required that the thinker is acquainted with *Ube* and the property of *being a cat*. This commits Russell to *acquaintance* as specified in §1.1.3. In addition, *ACQ* specifies the nature of the acquaintance relation according to Russell: direct awareness of an object or a property. Thus, Russellian acquaintance is an epistemic relation that provides *immediate knowledge* of some object or property and is said to be *indubitable*. At some points Russell suggests that knowledge by acquaintance has the additional epistemic feature of being *perfect*, in the sense that there is no further thing to know concerning the thing with which one is acquainted.²³ If it is accepted that knowledge by acquaintance is both perfect and indubitable, then Russellian *ST* is also committed to *know-wh*. If one is acquainted with some object, then one has individuating knowledge of it.

The complete Russellian picture of ST is one in which an agent is related in thought to a singular proposition; this requires acquaintance (i.e., direct awareness) of the object with respect to which the thought is singular. This concludes our discussion of why Russellian ST is committed to markers of singularity (ii)-(v) as represented in *Table 1*.

Before moving on, we briefly discuss the limitations of Russellian ST. Many have found the traditional Russellian theory of ST unsatisfactory; the primary reason is that it is far too restrictive on which STs a subject can enjoy because of Russellain acquaintance. Russell held that the only objects which we can be acquainted with are sense-data, universals, and (perhaps) oneself, since these are the only things that can be known indubitably. And so the only STs one can enjoy will be concerning sense-data or oneself. Consider the example of the content of the sentence "Ube is a cat". According to Russell's view, ordinary proper names do not function as *logically* proper names, that is they do not serve merely to refer to their objects, rather they break down under analysis into complete definite descriptions.

 $^{^{23}}$ See Russell [116, pp.46–47]

Thus the content of "Ube is a cat", while having the property of *being a cat* as a constituent, will not have *Ube* as a constituent. Rather, the expression "Ube" is to be analyzed into a definite description, with content consisting only of sense-data and universals, that uniquely denotes Ube.

Since Russell's time, there have been a number of developments in the philosophy of language that expand the realm of expressions of logically proper names, i.e., referential expressions, beyond what Russell took them to be. Kripke [82] forcefully argued that ordinary proper names are referential and do not break down under analysis; and so the occurrence of an ordinary proper name in a sentence semantically contributes the object to which it refers. In addition to arguments provided by Kripke for the referential theory of names, Kaplan [75][76] and Perry [102][103] argue that demonstratives ('this' and 'that') and indexicals ('today', 'she', 'I', 'actually', etc.) are referential expressions. Many are convinced by these arguments, which have as a result that the class of singular propositions we can express and entertain extends far beyond those that concern sense-data or oneself. As such, the class of STs, understood as cognitive relations to singular propositions, is also expanded. Moreover, Russellian acquaintance must be replaced with some weaker relation if acquaintance is to serve as a constraint on having some ST at all.

1.2.2 The *De Re* and The *De Dicto*

In this section we discuss the relationship between the notion of ST and the commonly appealed to de re / de dicto distinction for propositional attitudes or their reports, or otherwise, the DR/DD distinction.²⁴ Appeals to this distinction are often applied brazenly to discussions concerning ST; it is typically assumed that de re thought and ST are one and the same, but this is mistaken.²⁵ Whether ST and de re thought are identical depends on the analyses of both notions. Some analyses of these notions result in their identity, while

²⁴For a useful discussion of the DR/DD distinction that we rely upon in this section, see Nelson [95].

²⁵For instance, see discussion of ST and de re thought in the introductory chapters to Goodman et al. [50], especially fn. 1, and Jeshion [64].

variance in one analysis or the other results in their non-identity. We will consider two ways of understanding the DR/DD distinction. The first, the *syntactic*, does not overlap much with any theory of ST; the second, the *semantic*, overlaps only with conceptions of ST that are content based and tie together closely the contents of thought and language.

The syntactic analysis of the DR/DD distinction is cashed out in terms of the logical or syntactical structure of attitude attributions and reports. As remarked by Crane [20, p.30],

Traditionally, the distinction between the *de re* and the *de dicto* is conceived as a distinction in the relative scope in a sentence of a name or a quantifier and some other operator or predicate in the sentence. As such, *it is a syntactic or a logical distinction*.

(Emphasis added)

The DR/DD distinction as described by Crane applies to propositional attitude reports and acquires a foothold in the philosophical literature around the time Quine [107] discussed the distinction under the guise of *relational* (i.e., *de re*) and *notional* (i.e., *de dicto*) senses of propositional attitude reports.²⁶ To illustrate the relational and notional distinction, consider the following sentence.

(1) Albert believes that someone is a philosopher.

Quine claims that (1) is ambiguous between the narrow scope (notional) reading, (1a), and the wide scope (relational) reading, (1b), of the sentence:

- (1a) Albert believes there are philosophers.
- (1b) Someone is such that Albert believes they are a philosopher.

Correspondingly, each disambiguation has a distinct logical structure.

(1a*) Albert believes that $(\exists x)(x \text{ is a philosopher})$.

 $^{^{26}}$ Although the scope distinction this analysis relies upon is also present earlier in Russell [114].

(1b^{*}) $(\exists x)$ (Albert believes that x is a philosopher).

Of course, there is nothing unique about the occurrence of 'belief' in these reports, and the wide/narrow scope ambiguity generalizes to other propositional attitude reports.

Ultimately, Quine rejects the wide scope reading (1b) and (1b^{*}) as 'dubious business' for the reason that it permits the generation of Frege-style cases.²⁷ Setting aside Quine's concerns, the wide scope disambiguation provides a way to characterize the syntactically *de re*. We borrow the following characterization from Nelson [95].

Syntactic de re: A sentence is syntactically de re just in case it contains a pronoun or free variable within the scope of an opacity verb that is anaphoric on or bound by a singular term or quantifier outside the scope of that verb.

If the DR/DD is understood as a syntactic distinction, then *de re* thought is not identical to ST because it runs afoul of representative examples of ST. Most would agree that any correct syntactically *de re* attitude report is one that reports a ST. However, many syntactically *de dicto* attitude reports may also report a ST. Consider the classical example from Kripke [81],

(2) Pierre believes that London is not pretty.

This sentence is both syntactically $de \ dicto$ and a representative example of ST, for Pierre's belief is singular with respect to London. Thus, the syntactic $de \ re$ and ST are not one and the same.

There are two other ways of understanding de re thought discussed by Nelson [95] that may align with certain theories of ST, the semantic de re and the metaphysical de re. For brevity, we shall treat with only the semantic de re.

Much after Quine, Burge [15] discusses the DR/DD distinction and expresses dissatisfaction with the syntactic characterization. In particular, Burge claims that there are clear

 $^{^{27}}$ Quine [107, p.159]. Here we understand Frege-style cases broadly to include those cases in which an otherwise perfectly reasonable individual can be correctly ascribed 'relational' contradictory beliefs when exportation is permitted for distinct, 'notional' belief attributions that are true.

cases cases of the syntactically $de \ dicto$ but are 'nevertheless $de \ re$ ' and pushes us towards a semantic characterization of the distinction; one in closer alignment to some theories of ST.

It should be clear by now that an adequate criterion for drawing the de re/dedicto distinction must focus on the meaning, or at least the logical form, of the relevant sentences. Unfortunately, since philosophical issues come thick and fast at the level of logical form, any such criterion is bound to be more controversial than the intuitions it is designed to capture.

[15, p.342]

Although Burge has a nuanced view that departs from identifying de re thought and ST, his remarks highlight a shift to a concern for a semantic distinction for the DR/DD while noting the controversies that may arise when appealing to logical form.

Given that one popular way of understanding the notion of ST inherited from Russell is in terms of content, a semantic account of the *de re* provides a way develop their overlap.²⁸ Here is how Nelson characterizes the semantic *de re*.

Semantic de re: A sentence is semantically de re just in case it permits substitution of co-designating terms salva veritate.

To illustrate, consider the following canonical examples.

(3a) Superman can fly.

(3b) Clark Kent can fly.

According to the semantic de re, both (3a) and (3b) are de re sentences (likewise, (1b)). For 'Clark Kent' and 'Superman' are co-designating terms that may be substituted for one another without thereby affecting the truth value of the sentence. We may now inquire whether embedding these sentences in a belief context results in de re attitude reports.

(4a) Lois Lane believes that Superman can fly.

(4b) Lois Lane believes that Clark Kent can fly.

 $^{^{28}}$ Unsurprisingly Burge [15] claims in fn.11 that Russell thought that all singular beliefs are *de re*.

Whether (4a) and (4b) are semantically *de re* is controversial. At first blush, they seem not to be. For in the fiction Lois Lane does not know that Superman = Clark Kent; moreoever Lois Lane believes Clark Kent is an ordinary human and thereby unable to fly.²⁹ So, a commonsense judgment would be that (4a) is true while (4b) is false. Such judgments push us to further hypothesize that there is a semantic difference between the names 'Superman' and 'Clark Kent'.

However, as noted in §1.2.1, it has been widely argued and endorsed that proper names are Millian, i.e., referential, and so contribute only their referent to the propositions expressed by sentences containing them. If this is true for all contexts, then a naïve Millian must admit that 'Superman' and 'Clark Kent' have the same meaning, for they have the same referent. So, these terms are intersubstitutable *salve veritate*. And so, it follows that (4a) and (4b) are semantically *de re*. Moreover, if a roughly Millian view about the semantics of proper names is correct, then it turns out that any attitude attribution that contains a proper name within the scope of an attitude verb is semantically *de re*; hence (2) will also be semantically *de re*. Under these assumptions, it turns out there is a rather close alignment, if not identity, between some content based views of ST and the semantic *de re*.

Alternatively, under the supposition that Millianismm is false, and thereby (4a) and (4b) are not semantically *de re*, one has more reason to reject the identification of *de re* thought and *ST*. For one might endorse a variant Fregean view according to which both (4a) and (4b) report a *ST* that is singular with respect to Clark Kent—if it is accepted that the sense of 'Superman' and the sense of 'Clark Kent', although distinct, are object-dependent with respect to Clark Kent.³⁰

Wrapping things up, if one opts for a syntactic DR/DD distinction, then de re thought and ST will surely not be one and the same. However, if one opts for a semantic DR/DD

 $^{^{29}}$ Interestingly, once Lois Lane comes to know that Superman = Clark Kent our intuitions may shift.

 $^{^{30}}$ The example is troublesome for object dependence owing to Clark Kent being a fictional character. Either we must admit fictional entities as part of our ontology or deny there are such object-dependent thoughts. Additionally, it is disputed among Frege scholars whether Fregean senses are object-dependent. However, requiring object-dependent senses is one such way that one could construct a theory of ST based upon Fregean content that drives a wedge between ST and the semantic *de re*, so understood.

distinction, then there is room for identifying de re thought and ST depending upon which analysis of ST is favored. Content based views of ST appear more amenable to the identification with semantic de re thought. However, as Goodman and Genone [49] note, de re thought does not accommodate cases of empty names or fictional entities (if denied a place in our ontology), for there is no corresponding res; but some theorists are motivated to account for corresponding cases of 'empty' ST or those concerning fictional entities.³¹ All of this is to say that we should be wary of using de re thought and ST interchangeably. Although the view we ultimately go on to argue in favor of and endorse is closely tied to the semantic de re, our primary concern is with ST; careful treatment of ST requires considering analyses of the DR/DR distinction and ST separately.

1.2.3 The Strawsonian Transcendental Argument

The final strain of thought we consider that was influential in the development of ST in analytic antiquity is the transcendental argument introduced by Strawson [132, p.5–10]; we shall interpret Strawson's argument as concerned with singular propositional contents and restrict much of our discussion throughout to the notion of ST that identifies it with a thoughts having singular propositional contents. Strawson argues for the claim that singularity is necessary—in the sense that our capability to refer to contingent particulars cannot depend solely on descriptive expressions that express purely general propositional contents. If we know that we refer to contingent particulars, but reference cannot be secured by descriptions that express purely general propositional content, then it follows that reference to any contingent particular x must be *either* in some sense *direct*, i.e., unmediated by properties that the particular instantiates, *or* it must depend on reference to some contingent particular y that is referred to directly.³²

³¹See Crane [20],[21], and Sainsbury [119].

 $^{^{32}}$ Evans notes that Russell was also motivated this line of reasoning, resulting in his commitment to acquaintance:

[&]quot;Russell was as aware as anyone else that not everything can be thought of by description, on pain of the whole system of identification failing to be tied down to a unique set of objects, in the circumstances which

For ease of discussion we shall stipulate that if direct reference occurs in thought or speech, the associated propositional contents are singular contents. We might then regiment the Strawsonian *Transcendental Argument* in the following way.

The Transcendental Argument

- 1. We successfully identify (i.e., refer to) particulars in thought and language. (Premise)
- 2. If all contents of thought and speech are purely general (i.e., involving only properties) and massive reduplication is possible, then it would not be possible to successfully identify particulars. (Premise)
- 3. Massive reduplication is possible. (Premise)
- 4. Suppose, all contents of thought and speech are purely general. (assumption for *reductio ad absurdum*).
- 5. It is not possible to successfully identify particulars. (2,3,4 modus ponens)
- 6. Not all contents of thought and speech are purely general. (1,4,5 reductio ad absurdum)
- If not all the contents of thought and speech are purely general, then some are singular. (Premise)
- 8. Therefore, some contents of thought and speech are singular. (6,7 modus ponens)

In this argument Strawson elucidates premises (2) and (3), and their relevance to the argument, by appeal to a reduplication thought experiment:

So, it may seem, in the non-demonstrative identification of particulars, we depend ultimately on description in general terms alone. Now one may be very well informed about a particular sector of the universe. One may know beyond any doubt that there is only one particular thing or person in that sector which answers to a certain general description. But this, it might be argued, does not guarantee that the description applies uniquely. For there might be another particular, answering to the same description, in another section of the universe. Even if one enlarges the description so that it incorporates a description of the salient features of the section of the universe concerned, one still lacks a guarantee that the description individuates. However much one adds to the description

Strawson has called 'massive reduplication'." [33, p.45]

of the sector one knows about—its internal detail and its external relations this possibility of massive reduplication remains open. No extension of one's knowledge of the world can eliminate this possibility.

[132, p.7-8]

Given that we know that we succeed in referring, but that we do not know whether we occupy a universe where massive reduplication holds, it follows that we must succeed in referring in non-demonstrative cases without reference mediated by general terms alone. If successful reference is not secured by purely general descriptions, then it succeeds owing to the contributions of singular terms that refer without mediation through general content. Hence, in order to account for our success in referring, singularity is necessary.

The argument, as informally formulated in (1)-(8), is intended to establish the conclusion that there must be singular propositional contents; i.e., contents that have some non-abstract object as a constituent other than the individual expressing or entertaining the content. Some further interpretive work to be done regarding the Strawsonian line of argument is to determine whether it could and/or should alternatively be constructed to establish the necessity of other features that are appealed to as markers of singularity. We shall set this project aside and focus on STs qua mental states with singular propositional contents.

The importance of *The Transcendental Argument* for the historical development of ST is that it provides reason for thinking that we *must* be committed to ST, insofar as we are committed to the claim that we successfully refer in thought and speech. And so, it is incumbent upon us to provide an account of the nature ST. That is, if *The Transcendental Argument* is correct, then we cannot avoid appeals to singularity, and so, it is important to give an account of what singularity consists in. What Strawson appears to be latching on to, which also motivated Russell's acquaintance constraint, is that there must be some way in which we get a *cognitive grip* on individuals in the world by means other than being related *solely* to properties or complexes thereof which they instantiate.³³ Moreover, the

 $^{^{33}}$ The use of 'property' here is intended to refer to features that are genuinely repeatable, ruling out *haeccities* or the *thisness* of a thing, or any other such feature that *is necessarily* unique to an individual, as being genuine properties.

context in which Strawson motivates the argument is one in which we succeed in referring to contingent particulars when those particulars are not demonstratively identifiable, for instance, by not being within our field of vision. In such cases, Strawson appeals to our ability to refer to non-demonstratively identifiable contingent particulars by relating them to some contingent particulars that we are able to refer to—more specifically, those that are demonstratively identifiable. Thus, of particular interest are those instances in which reference is secured to some contingent particular x that depends for its success on reference to some other contingent particular y. Although these cases are largely overlooked in the literature on singular thought, a careful analysis of them would help to further illuminate how to understand singularity.

1.3 From the 70s to the Aughts

The development of ST as discussed in §1.2 set the stage for future investigation into the phenomenon. With the introduction of ST by Russell, the conditions on singularity he endorsed (specified in *Table 1*) came tied together in a packaged deal. As we shall see, these conditions have slowly been pulled apart as discussion of ST developed from the 70s into the contemporary. Additionally, we pointed out that, although *de re* thought and ST are often treated as a univocal notion, this only holds under certain analyses of each; so, we shall not assume their identity. In §1.2.3 we saw how Strawson motivated the indispensability of, at minimum, singular contents by appeal to *The Transcendental Argument*. The extent to which this argument applies to ST generally will depend upon either the strength of the connection between singular content and ST or the extent to which the argument can be modified to apply to competing accounts (non-content accounts) of the nature of ST.

In this section we consider how ST has been developed and defended from the 1970s through the 2000s. We begin with views that are closely connected to the motivations of Russell and Strawson which tie accounts of ST tightly to singular contents; such views are espoused by Peacocke [98], Evans [33], McDowell [91], Salmon [121], and Soames[129][130]. Following that, we discuss views developed by Grice [52], Evans [32], Strawson [134], and Perry [101] which set the groundwork for the popular contemporary understanding of ST in terms of *mental files*.

1.3.1 Heyday Content Views

The most popular conceptions of ST during the period that is usually understood as the heyday of analytic philosophy of mind (roughly from the 1970s to early aughts) are those conceptions that closely connect ST with Russellian or singular contents.³⁴ These conceptions often closely resemble the conception of ST espoused by Russell, with the caveat that the objects with which we are acquainted, and thereby able to entertain STs concerning, are more plentiful than initially thought by Russell. Thus the markers of singularity that are typically understood as constitutive of its nature in heyday content views are (ii) directness, (iv) acquaintance, and (v) object-dependent. Of these features, commitment to directness is often motivated by commitments concerning the semantics of referential expressions and Strawsonian concerns, and the corresponding mental ability to refer in thought is often explained in terms of acquaintance. Although acquaintance entails object-dependent, there are also independent motivations for endorsing object-dependent that appeals to explanation of intentional actions. We shall focus on these latter two conditions in our discussion and set aside directness itself.

We shall begin with acquaintance since on any celebrated conception of acquaintance it entails object-dependence. The notion of acquaintance endorsed by theorists of the heyday must be less stringent than that endorsed by Russell simply owing to the fact that many objects which they admit as objects of acquaintance do not meet the demand of indubitability Russellian acquaintance requires.³⁵ The liberalization of the acquaintance relation has been

 $^{^{34}}$ Where *singular contents* are understood as those contents that constitutively involve an object or objectdependent entity and *Russellian contents* are understood as a species of *singular content* that constitutively involve an object.

³⁵Evans[33, pp.44-45] characterizes Russell's theory of mind as essentially Cartesian for one cannot be

predominately motivated by arguments in the philosophy of language that purport to expand the class of referential expressions. As noted in §1.2.3, whereas Russell thought that the only expressions that are referential (i.e., strictly proper names) are 'I' and 'this',³⁶ arguments from Kripke [81] convinced many that ordinary proper name are also referential; arguments from Kaplan [75][76] extended the class of referential expressions to demonstratives and Perry [102][103] extended it to indexicals. If the conclusions of these arguments are taken on board and one endorses a broadly Russellian view of ST, then the class of propositions with singular contents that agents are in a position to entertain is greatly expanded. Insofar as acquaintance with the constituents of singular propositions is maintained as a constraint on entertaining those contents, and many of our true attitude reports involve referential expressions, it follows we must be acquainted with more objects than those whose existence is indubitable. And so, acquaintance must be understood as weaker than indubitability.

Indeed, many of the proponents of heyday content views endorse something like a weakened acquaintance constraint.³⁷ For instance, Evans endorses a weakening of acquaintance that treats the relation as *epistemic* and Russellian in spirit since it is a result of sharpening what Evans [33, p.44] refers to as *Russell's Principle* (RP):

It is not possible for a person to have a thought aboutRP: something unless [they know] which particular individualin the world [they are] thinking about.

As Evans notes, the difficulty of making RP precise lies in giving an account of *knowing* which, i.e., giving an account of singularity marker (vi) know-wh. One way of doing so is analyzing know-wh as Russellian acquaintance, i.e., indubitability that requires individuative knowledge of the particular in question. The weakened version that Evans endorses is one

wrong about the fact that they are entertaining some thought or other. Moreover, the items with which we are Russell-acquainted have the *Cartesian property*: "it is not possible for a subject to think that there is an item of the relevant kind with which he is acquainted... without there being such an item."

³⁶Russell [115] p.121

³⁷We say 'something like' because these views often have Fregean ingredients, e.g., modes of presentation, that require some particular relation to the objects that singular contents are dependent upon—whether they're causal, epistemic, or something of the like.

that treats *know-wh* as having *discriminating knowledge*, that is, "the subject must have a capacity to distinguish the object of his judgement from all other things."³⁸ The account of discriminating knowledge itself requires further specification, but it is certainly weaker than indubitability.³⁹

Evans felt both the pull of *RP*, perhaps as a means of securing our cognitive grip on the world, and the arguments in the philosophy of language the purport to expand the class of referential expressions. But Evans' notion of acquaintance is still stringent enough that some attitude reports containing purported referential expressions must either be taken to fail to truly express a subject's attitudes or fail to contain referential expressions.⁴⁰ As such, Evans conception of acquaintance divides the contents of thought and language; such views have been called *split-acquaintance* views.⁴¹ Split-acquaintance views make trouble for what Bach [6, p.222] calls *The Specification Assumption* (SA):

SA: Belief reports specify belief contents, i.e., to be a true belief report must specify a proposition the person believes.

The trouble for SA when adopting split-acquaintance follows from the multitude of belief reports that we would ordinarily take to be true, but now must deny the truth of if we were to hold on to SA; e.g., any belief report expressed by a subject or attributed to a subject that refers to an object with which the subject is not acquainted.

For Evans, split-acquaintance is a result of the epistemological connection that Evans draws between thought and language that is influenced by Russell's epistemology. Here are Evans' [33, p.92] remarks.

I hold that it is in general a necessary condition for understanding an utterance of

³⁸Evans [33] p.89

³⁹Evans continues by supplying a trichotomy of sufficient conditions for discriminating knowledge, "...for example, when one can perceive [an object] at the present time; when one can recognize it if presented with it; and when one knows distinguishing facts about it."

 $^{^{40}}$ For example, in the former case if someone asserts "Pluto is a not planet" (among other truths) but has no discriminating knowledge of Pluto, Evans will deny that they have any ST concerning Pluto even though they can competently use the expression 'Pluto'. In the latter case, names introduced using descriptive conditions to fix reference will not be purely referential; i.e., 'Julius' = 'The actual inventor of the zip.' See Evans [33, p.50]

⁴¹See Almog [1] and Hawthorne and Manley [57, p.23-25].

a sentence containing a Russellian referring expression, say 'a is F', that one have a thought, or make a judgement, about the referent, to the effect that it is being said to be F. This is not a necessary condition for making such an utterance in such a way as to say of the referent that it is F. The divergence arises because of the possibility that a subject may exploit a linguistic device which he does not himself properly understand. Given the divergence between the requirements for *understanding* and the requirements for *saying*, it would be absurd to deny that our primary interest ought to be in the more exigent conditions which are required for understanding.

On this account, one may competently use certain referential expressions absent understanding them.⁴² For understanding referential expressions requires being in a position to think about the objects they pick out, which requires discriminating knowledge of those objects on Evans' account. And so, one may find themselves in a position where they competently use referential expressions to communicate without the capability to entertain thoughts concerning the objects those expressions pick out.⁴³

In opposition to epistemic construals of acquaintance, one may instead opt for a *causal* construal. On such conceptions the link between thought and language is liberalized such that one is in a position to entertain STs concerning an object if one is in an appropriate causal relation to the object, and oftentimes this constraint is satisfied in virtue of being able to to competently use a referential expression that picks it out. This results in liberalizing the acquaintance constraint beyond those resulting from weakened epistemic views, such that subject's are acquainted with objects they bear the appropriate causal connections to even if they fail to have appropriate discriminatory knowledge of those objects. So, if one learns the term 'Pluto' in an appropriate causal chain leading back to the initial baptism of Pluto being so named, then one will be in a position to entertain STs concerning Pluto (*contra* Evans). In this way, some of our ST's are *linguistically mediated*.⁴⁴

However, on such causal conceptions of acquaintance, there is still room for a degree of

 $^{^{42}}$ Here we may understand *linguistic competence* simply as having the capability to use an expression to effectively communicate with other speakers of the language.

⁴³In effect, Russell ruled out this possibility by delimiting the class of referential expressions to those which one has indubitable knowledge of their objects.

⁴⁴See Soames [130, pp.587–589].

separation between language and thought. For example, consider Kaplan's canonical example of Newman 1. The name "Newman 1" is introduced by using the reference fixing description "the first child to be born in the twenty-second century."⁴⁵ Supposing "Newman 1" is a genuinely referential expression, causal accounts will predict that individuals competent with the expression are able to say things of Newman 1 without being able to entertain STsconcerning them. Of course, one may preserve the connection by taking the alternative route and deny that "Newman 1" is a genuinely referring expression, but it is then required to give an account of why names whose reference is fixed by description differ in their semantic role from those names that have their reference fixed by causal connections.

Whether one opts for an epistemic or causal liberalized notion of acquaintance, if the constraint is taken to be something weaker than indubitability, connections are lost between it and other markers of singularity. Indubitability entails knows-wh, but if one opts for a merely causal conception of acquaintance, know-wh is no longer entailed, while object-dependent, object-involving, and directness are preserved. Otherwise, on a liberalized epistemic conception of acquaintance the constraint is reduced to knows-wh. Such a conception entails object-dependent and object-involving. And, although Evans' epistemic account of acquaintance seems committed to directness, whether an epistemic view is committed to directness depends on how RP is specified. The heyday content views appear to be best understood as broadly endorsing an epistemic conception of acquaintance that reduces it to a knows-whrelation. However, this relation itself may many times be satisfied through the presence of a causal relation, e.g., though perceptual contact with an object, yet not required.

We may represent the liberalized acquaintance based content views with the following tables.

 $^{^{45} {\}rm See}$ Kaplan [74, pp.200–201]

Epistemic Based Content ST			
i	Name-like-syntax	?	
ii	Directness	?	
iii	Object-involving	\checkmark	
iv	Acquaintance	\checkmark	
v	Object-dependent	\checkmark	
vi	Know-wh	\checkmark	
vii	De-re-report	×	
TT 11 0			

Table 3

С	ausal Based Content S	ST
i	Name-like-syntax	?
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	\checkmark
v	Object-dependent	\checkmark
vi	Know-wh	x
vii	De-re-report	x
	Table 4	

In both cases it is left open whether theorists endorsing these acquaintance constrains on content views must endorse (i) name-like-syntax. Insofar as thought is grounded in relations to sentences, and ST is grounded in sentences containing singular terms, it is plausible that causal acquaintance accounts are committed to name-like-syntax. With respect to epistemic acquaintance, the resulting split between the content of thought and language suggests that there is no commitment to name-like-syntax and is consistent with its denial. In neither case is the connection between thought and language strong enough to commit to (vii) de-re-report, even if a semantic analysis of the DR/DD is endorsed.

It is worth noting that endorsement of the acquaintance relation for heyday content views is largely motivated to account for Strawsonian epistemic concerns about having some way to get a cognitive grip on the world in the face of massive duplication worries, and the liberalization of acquaintance is motivated by our seeming capability to entertain a widevariety of singular propositional contents that indubitability otherwise rules out. As such, acquaintance is a way to secure our cognitive grip on the external world and its liberalization is a way to accommodate what language teaches us about the variety of objects we can have a cognitive grip on.

Insofar as we understand having a *cognitive grip* on the world as being in a position to entertain singular propositions, the discussion surrounding acquaintance is founded on our accepting an account of ST that assumes it is to be understood in terms of the content of thought. So, it remains to be seen what independent motivation there is for endorsing a content view about the nature of ST. Now that we have completed our survey of how the liberalization of *acquaintance* played a roll in the development of views heyday content views of SL, we shall discuss how content views are independently motivated by appeal to the explanation of intentional action; in particular, how this motivation provides reason for endorsing (v) *object-dependent*.

During the heyday of analytic philosophy of mind much ink was spilled attempting to defend and/or vindicate folk psychology; this is exemplified most in the works of Jerry Fodor [40][39][41][42], but there is no shortage of other folk psychological apologists. Folk psychology is often understood as our ordinary use of mentalistic expressions in attributing states to individuals in order to explain their intentional actions. There are disputes over whether folk psychology is best understood as a theory, or a proto-theory, or perhaps merely a set of platitudes. We shall often speak of the theory of folk psychology to refer to the relevant set of platitudes that concern ordinary mental states and their connections to action, but take no stance on whether these platitudes constitute a theory. The important matter is only that appeal to our ordinary practices of attributing mental states to subjects in order to

explain their actions is *extraordinarily* successful. So much so that any metaphysics of mind that is not consistent with the success of folk psychology we think ought to be rejected.

If a complete characterization of the states that folk psychology appeals to requires appeal to singular contents, then we have good reason to endorse the existence of intentional attitudes with such contents. Moreover, if a theory of the nature of ST is one that identifies it with intentional attitudes with singular contents, we have reason to endorse that theory of ST. So, if folk psychology requires intentional attitudes towards singular contents, we have reason to accept some version of a content based theory of ST. As it turns outs, arguments in favor of ST during the 1980s motivate it in this way.

The necessity of singular propositions in folk psychology is captured by Peacocke's *Indispensability Thesis.* Peacocke characterizes it in the following way [98, pp.205–206].

No set of attitudes gives a satisfactory psychological explanation of a person's acting on a given object unless the content of those attitudes includes a demonstrative mode of presentation of that object.

Let's unpack this a bit. A set of attitudes possessed by an agent is some set of propositional attitudes; that is, a set of beliefs, desires, fears, hopes, and etc., that are had by an agent. The contents of such attitudes are standardly taken to be propositions expressed by the *that*-clause that follows the attitude verb in their ascription. In Peacocke's case, the propositional constituents are Fregean senses, however the thesis may be adapted in a way that is neutral with respect to the nature of the propositional constituents. Here is our statement of the *Indispensability Thesis* (IT).

No set of attitudes gives a satisfactory psychological explanation

IT: of a person's acting on a given object unless the content of those attitudes *depends for their individuation* on the object acted upon.

The italicized locution may be a bit obscure, but it is intended to capture any view of content according to which the identity conditions of some contents depend on the object that they are about, and as such, those contents are dependent on the existence of the object they are about; i.e., they satisfy (v) *object-dependent*. Thus, both Fregean views that have object-dependent senses as propositional constituents and Russellian views which include objects themselves as constituents fall under the generalized IT.

If the IT is correct, we have good reason to adopt some theory of ST that is tied closely to a notion of is singular contents, since those are just the kinds of contents claimed to be indispensable by the thesis. The question is then, why ought we to accept IT? Peacocke justifies the thesis by appeal to an example of an individual grasping a container they believe to contain life saving pills. Peacocke queries,

Would such an explanation of the agent's consuming the pills from the container in front of him be satisfactory if he thinks just this: "The container left by the doctor has the pills I need to live"?...

and responds,

... No: for that would not explain his acting on the container in front of him unless he also thought: "The container left by the doctor is that container", where 'that container' picks out an object presented to the subject in a particular way in perception.

[98, p.207]

The relevant point here is that in order to explain the agent acting on *that* container we must appeal to some thought of the agent with content that depends for its individuation on that container.

If this point generalizes to other explanations of intentional action on individuals, then singular contents earn their keep by being a necessary component for an adequate theory of the commitments delivered by folk psychology. Given that there does not appear to be anything unique about the pill container example, if one is convinced by it, then one ought to be convinced of the *IT*. And so, there is independent motivation for thinking that there are intentional attitudes with singular contents.

As expected, the *IT* is not uncontroversial and the literature in the heyday had its share of detractors that defended the equally controversial antithesis of *methodological solipsism*. We

shall not dedicate time to defending the IT nor discussing methodological solipsism here. We merely wish to point out that a compelling theoretical motivation for endorsing an analysis of ST that connects it closely to singular content, by way of providing independent motivation for commitment to intentional attitudes with singular content, has historical precedent originating in commitments concerning the nature of folk psychological explanations. Those interested in methodological solipsism and its conflict with the IT may refer to Chapter 4, §4.2.1 for further discussion.

This concludes our discussion of heyday content views and their motivations for endorsing a liberalized acquaintance relation as a constraint on ST, as well as motivations for endorsing singular content of intentional states, understood as object-dependent content, as constitutive of ST. These views, although closely resembling Russell's motivations and commitments, slowly begin to pull apart the package of markers of ST introduced by Russell. As will be seen, these markers become further disentangled in the contemporary discussion of ST.

1.3.2 proto-Files Frameworks

One other influential strain of thought in the late analytic era, introduced by Grice [52] and further deployed in the works of Evans [32], Strawson [134], and Perry [101], is appeal to a 'dossier' or 'mental files' metaphor to capture how information concerning individuals is organized in a subject's mental life. The introduction of the files metaphor is not a direct competitor to the post-Russellian content views. However, its appearance in the literature and subsequent development in the contemporary has resulted it in becoming one of the most popular accounts of ST discussed today. In this section the introduction of the metaphor and the role it played within earlier theories of ST is discussed.

While the work that Grice initially introduces the notion of a 'dossier' in does not strictly concern ST^{46} , the metaphor is introduced in connection to providing a schematized account of the difference between the purported referential and descriptive uses of definite descriptions

 $^{^{46}}$ For context, Grice's[52] primary concern in this work is how to accommodate vacuous names in our standard predicate logic.

introduced by Donnellan [28]. Here is how Grice cashes out the notion of a dossier.

Let us say X has a dossier for a definite description δ , if there is a set of definite descriptions which includes δ , all the members of which X supposes (in one or other of the possible sense of 'suppose') to be satisfied by one and the same item.

[52, p.141]

The schematized account Grice then offers is the following. When deploying a referential use of a definite description δ in conversation the speaker has the intention that the hearer comes to think (a) the speaker has a dossier for the definite description δ and (b) the speaker chose δ , in part, anticipating that the hearer has a dossier with which δ overlaps. In contrast, descriptive uses of definite descriptions do not carry such conversational intentions. Whether there is a genuine distinction to be made between referential and descriptive uses of descriptions is neither here nor there for our purposes, but the account of dossiers introduced by Grice and how it is deployed is informative.

As described by Grice, dossiers are collections of definite descriptions that a subject presupposes apply to a unique individual. Their purpose is primarily for the organization of information that is taken by a subject to concern a single thing; importantly the definite descriptions in the dossier may not be true of the individual of which they are presupposed. The highlighted role of dossiers in Grice's account is that they subserve communicative goals: overlapping dossiers among interlocutors assist speakers in having their hearers come to recognize the individual of which they are speaking. With respect to ST, recognition—especially perceptual recognition—of an individual is standardly taken as a sufficient condition for the entertainability of singular propositions concerning the individual. So, we might speculate that Grice's account of dossiers connects with early accounts of ST by means of providing a resource to account for how singular propositions may be communicated when definite descriptions are deployed. That is, a speaker's deployment of a definite description is referential, and serves to communicate a singular proposition concerning an individual I, if the conditions are met that the definite description deployed is among those in a dossier belonging to the hearer that concerns I and they thereby come to recognize the speaker intends to communicate something about I. In effect, Grice's account is one which tells us how ST on traditional theories can be transmitted via deploying definite descriptions.⁴⁷

Evans borrows the expression 'dossier' from Grice and goes on to apply it directly to subjects' thought concerning objects and their intended linguistic reference. A subtly important addition that Evans makes is that the information in a dossier has sources.⁴⁸ And, although one may misidentify an individual Y as X and add information sourced from Y to their X dossier, overtime, if they consistent misidentify Y as X, then Y may become the *dominant* source of information and the dossier will shift to picking out Y. Thus Evans' notion of dossiers permits not only that information in a dossier may be false of the individual the dossier is supposed to concern, but the individual with which the dossier is supposed to concern may shift over time. Moreover, Evans thinks that, in general, the individual to which a subject intends to refer when using a name is one that is the dominant source of information for a dossier associated with the name. The notion of dominance with which Evans is concerned is unclear, but he states that it is not merely the amount of information (whatever that may amount to) within a dossier that determines which individual the file picks out. Additionally the subject, to which the mental file belongs, may have reasons for taking interest in the individual the dossier is of which bears weight on determining dominance.⁴⁹

More closely related to puzzles concerning ST, Strawson[134] appeals to mental files in his discussion of how identity statements containing co-referential expressions may be informative without appeal to Fregean sense. In order to give an account of how identity statements such as 'Cicero is Tully' may be informative, even though 'Cicero' and 'Tully'

⁴⁷For those that are skeptical of the distinction between referential and descriptive uses of definite descriptions, it is consistent to deny that the proposition expressed by the speaker in cases that Grice is considering is one that is singular, but that the speaker still intends that their interlocutor come to entertain a singular proposition about the individual to which the speaker presupposes the definite descriptions applies.

 $^{^{48}}$ The notion of a 'source' is left unspecified by Evans but his example of *seeing* suggests something like a causal connection.

⁴⁹This final feature, as well shall see, is influential of a prominent mental files theory of ST endorsed by Jeshion [66].

are held to have the same meaning in virtue of having the same referent, Strawson appeals to *segregated bundles of identifying knowledge* or segregated bundles, for short.

For a hearer of a name to have command of the name, as then used, it is sufficient that the name invoke some kind of identifying knowledge, in the hearer's possession, of the bearer of the name. But of course there is no reason in the world why a hearer should not be in possession of, as it were, segregated bundles or clusters of identifying knowledge which are in fact, unknown to him, bundles or clusters of identifying knowledge about the same thing. If this is so, and if one name in an identity statement invokes one such cluster, while the other invokes another, then indeed the hearer will learn something, and not simply something about the expressions, from the identity-statement which couples the two expressions.

[**133**, pp.43–44]

Segregated bundles are somewhat similar to the sets of definite descriptions that Grice appeals to, while also being both more and less restrictive across different axes. If we take the bundles to be *identifying knowledge* as Strawson states, then the bundles are more restrictive in virtue of being knowledge, and perhaps less restrictive in virtue of being identifying. If the bundles must be knowledge, then they could not fail to be true. But if they are identifying, then they may be definite descriptions or other, non-descriptive recognitional capacities. Whatever the case may be, Strawson's deployment of segregated bundles serves a different explanatory purpose than Grice's appeal to dossiers, as well as Evans' appeal to dossiers. But one might attempt to construct a generalized notion serving all such functions.

The use of 'file' talk is initially introduced in Perry [101] in order to resolve what Perry labels the problem of internal identity. Internal identity is a requirement on internal continued belief. To have an internal continued belief is merely to maintain some belief over time concerning some individual that may be expressed with different expressions in the subject position. Perry illustrates this with an example where he first has a thought he would express at t_1 using the sentence "That man near the bar is a dean" and later has a thought he would express (if speaking to that same man) at t_2 using the sentence "You are a dean." In this case, Perry's belief is maintained from t_1 - t_2 and would be expressed using sentences with distinct subject-expressions that refer to the same individual. Now, the *problem of internal identity* is to account for what makes it the case that Perry's thought that he had t_1 is of the same individual as the thought that he had at t_2 .⁵⁰

The solution is to introduce the theoretical notion of a file.⁵¹ The notion of a file is specified by Perry in the following passage.

Let us say that the set of sentences a person accepts at a given time is their doxastic profile at that time. We are now supposing, then, that linking various entries in the doxastic profiles of a given person at various times are causal chains, and the entries so linked we shall say belong to a single *file*. Files are clearly theoretical notions, even relative to profiles. Internal identity is not *displayed* in the profiles.

[**101**, p.329]

Perry goes on to further explicate the file metaphor, but the important ingredients are contained in his initial specification. Files are theoretical entities that are composed of sets of sentences accepted by a person at a given time that are linked *via* causal chains. The problem of internal identity is supposed to be solved by its being the case that certain sentences at a time are causally linked—in the appropriate manner—composing a single file. That is, what makes it the case that Perry's belief at t_1 and belief at t_2 is an instance of continued belief is explained by the fact that there is a causal chain linking the individual's doxastic profiles at t_1 and t_2 such that Perry's beliefs at each time belong to the same file.

Before moving on to discuss contemporary files frameworks, we shall briefly take stock of the theoretical roles that the notions of *dossiers*, *segregated bundles*, or *files* have been traditionally thought to occupy. There are at least six: from Grice, (1) distinguishing referential and descriptive uses of descriptions and (2) accounting for how singular propositions may be communicated using sentences only containing descriptions; from Evans, (3) shifts in reference of singular terms and (4) shifts in aboutness of thoughts; from Strawson, (5)

⁵⁰According to Perry [101, pp.326–327], internal identity does not require the presence and identity of singular terms referring to the individual over time since there are situations where one can come to recognize the same individual at t_2 and express the same belief had at t_1 without identity of singular terms.

⁵¹Perry credits this notion as developed out of considerations presented in Donnellan [29].

resolution of Frege puzzles, i.e., explaining how some identity statements are informative; from Perry, (6) internal identity of thoughts concerning objects overtime.

1.4 Contemporary Views

In this section we consider the development of ST from the 2010s through today. The views presented here are the primary positions that are endorsed in the contemporary. We begin with Mental Files Frameworks that have received much attention lately and developed out of the proto-files framework presented in the previous section. Following that we discuss Liberalist views about ST that do not commit to any sort of acquaintance condition, and may suggest that there is no unified notion of ST that does all of the theoretical work demanded of it. Finally we discuss recent work by Dickie [27] that treats ST by appeal to *cognitive focus* and which we label Justificatory Convergence.

1.4.1 Mental Files Frameworks

The 'file' metaphor, or variants thereof, appears not only in the philosophical works discussed in §1.3.2, but also within cognitive psychology (Kahneman et al. [70] and Pylyshyn [106]) and linguistics (Heim [60][61] and Kamp [71][72][73]). Given the appeal to files in various literature outside of philosophy, proponents of Mental Files Frameworks are partly motivated by the presumed empirical and scientific legitimacy lent to the framework. Whether 'files' as discussed in cognitive psychology, linguistics, and philosophy all amount to the same notion is an interesting interdisciplinary question. We don't assume the same notion is being appealed to in each literature (*contra* many files theorists in philosophy), since this is a substantive claim requiring appropriate justification, and will keep most of the discussion focused on the deployment of mental files in philosophy. The most developed accounts of contemporary Mental Files Frameworks for ST are developed in the works of Recanati [110][111][112] and Jeshion [66][67]. A crucial feature that distinguishes Recanati's view and Jeshion's is that Recanati commits to a form of acquaintance as a constraint on ST and Jeshion does not. We shall review them both, beginning with Recanati.

Recanati [111, p.147] defends the view that to have a ST is to have a thought "about an object involv[ing] a non-descriptive mode of presentation of that object, that is a mental file based on some acquaintance relation to the object." This characterization does not commit to the claim that thinking *via* any mental file is constitutive of ST, since one may have a thought about an object *via* a mental file that is not based upon some acquaintance relation (i.e., information-bearing relation), or is not about some object understood as a particular or individual, or is descriptively about the object. So Recanati's conception of ST is to be understood, at first blush, as thought *via* a mental file meeting three further conditions: non-descriptiveness, particularity, and acquaintance. Recanati's considerations related to the acquaintance constraint make the position more nuanced in a way worth discussing, but first we turn to Recanati's characterization of *mental files*.

Recanati [111, pp.34–35] introduces mental files and the roles they are intended to play in the following passage.

A non-descriptive mode of presentation, I claim, is nothing but a mental file... The role of the file is to store information about the objects we bear these acquaintance relations to. So mental files are 'about objects': like singular terms in the language, they refer, or are supposed to refer. They are, indeed the *mental* counterparts of singular terms... The reference is the entity we are acquainted with (in the appropriate way), not the entity which best 'fits' the information in the file.

The characteristic feature of the relations on which mental files are based, and which determine their reference, is that they are *epistemically rewarding*...

(Emphasis added)

Given this passage, it is clear mental files are intended to do quite a bit of heavy lifting. Cognitively, mental files are intended to play the role of Fregean sense⁵²; placing mental

 $^{^{52}}$ Here Recanati [111, p.28] makes the common conflation between the notions of *sense* and *mode of* presentation. Additionally, if we understand a *descriptive* mode of presentation as one which could be characterized by using a description, it is disputable whether modes of presentation should ever be thought of as descriptive.

files theorists in a position to resolve Frege-style cases from a psychological standpoint. On the cognitive and epistemic fronts, files are supposed to store information concerning the object they refer to, or are supposed to refer to, that is acquired through epistemically rewarding relations. Rencanati introduces the notion of an *epistemically rewarding* relation (ER relation) as one such that it may be exploited (presumably, reliably) to gain information concerning an object. The paradigm case of an ER relation is perceptual contact with an object; communicative chains may also function as ER relations. Finally, mental files are taken to be the mental analogues of singular terms—they are understood to be *vehicles* that bear individuals as their contents.

This characterization of mental files is, at a glance, largely amenable to many of the motivations for introducing 'files' talk in §1.3.2. This leaves open how to understand the relation between mental files and ST. Since ST is claimed by Recanati to be thought *via* a mental file based on an acquaintance relation, and mental files are taken to refer or purport to refer non-descriptively and be the mental analogue of singular terms, then ST must also share these features. But what of those cases where a mental file is present yet there is no acquaintance relation?

By all appearances, Recanati is in agreement with Evans [33] and Donnellan [30] in thinking that descriptive names, such as Kaplan's 'Newman 1' and Evans' 'Julius', although rigid, only contribute descriptive content to the propositions expressed with sentence containing them; we cannot entertain new STs simply by 'a stroke of the pen.'⁵³ That is, we cannot move from purely general thoughts such as thinking that *the inventor of the zip is F* to a STconcerning the the individual that invented the zip simply by introducing the name 'Julius' as 'the inventor of the zip' and thinking that *Julius is F*.

However, Recanati also claims to feel the pull of a thesis that runs counter to the acquaintance requirement. This thesis has been coined the *Instrumental Thesis* (*IT*) by Kaplan [77, p.603],

⁵³A phrase many borrow from Grice [52, p.140].

On my view, the connection with a linguistic community in which names and other meaning bearing elements are passed down to us enables us to entertain thoughts through the language that would not otherwise be accessible to us. Call this the *Instrumental thesis*...We can introduce a new name by describing the referent...[and] such names are still directly referential and...still have the capacity to enlarge what we can express and apprehend.

IT is a thesis that we also find extremely plausible; and one that Liberalist theories of ST would typically endorse.

Finding IT plausible, Recanati makes room for its endorsement and argues that his framework may accommodate acquaintanceless ST. His mental file framework rests on two held principles, [111, p.154].

- 1. The subject cannot entertain a singular thought about an object a without possessing, and exercising, a mental file whose referent is a.
- 2. To possess and exercise a mental file whose referent is a the subject must stand in some acquaintance relation to a.

Although (1) and (2) taken together seem to entail that there is no ST without acquaintance, Recanati argues this appearance is mistaken. For, the claim that mental files require some acquaintance relation to the referent is intended to be understood as a *normative* claim; this is distinct from the *factual* claim that mental files are not tokened absent an acquaintance relation. A mental file, Recanati claims, may be *opened* independently of whether there is acquaintance relation between the file owner and the rile referent. However a mental file requires "for its justification, that the subject stand in a suitable, information-bearing relation, to the referent" [111, p.158]. Ultimately, whether ST requires acquaintance within the mental file framework put forward by Recanati depends on whether one adopts the position that thinking via a mental file is constitutive of ST or whether thinking through a justified mental file (to borrow Recanati's way of speaking) is constitutive of ST; Recanati favors the latter.

The position that Recanati ultimately endorses regarding acquaintance is one that cleaves the grounds of ST into two notions: singular thought-vehicle ST_V and singular thoughtcontent ST_C ; where *vehicles* are understood as the internal constituents of mental states that bear contents. We are in a position to token a mental file, and thereby entertain a ST_V , if we have expected acquaintance, that is, if we anticipate an informational relation R to obtain between ourselves and a referent. Absent acquaintance obtaining, we are only able to entertain a ST_C if we have both tokened an ST_V and we are correct in our anticipation that R is to obtain. Thus having a genuine ST for Recanati is one in which both grounds, having a ST_V and having a ST_C , obtain.

With Recanati's position in full view, we may represent his Mental File Framework for ST in Table 5.

pistemic Mental Files	ST
Name-like-syntax	\checkmark
Directness	\checkmark
Object-involving	\checkmark
Acquaintance	\checkmark
Object-dependent	\checkmark
Know-wh	X
De-re-report	×
	Name-like-syntaxDirectnessObject-involvingAcquaintanceObject-dependentKnow-wh

In contrast to Recanati, Jeshion [63][66][67] offers an acquaintanceless mental files conception of ST that she labels *Cognitivism*; so named to underscore that cognition is fundamental for ST. On this view, mental files are purported to play three distinct functions: the identityfunction, bundling-function, and singular-function. The identity-function is that "[mental files] constitute the agent's individuation of objects and mode of identification of objects."⁵⁴ Hence, the cognitive role of mental files partly consists in storing information concerning the individuation and identification of an object to which a file refers. Regarding the bundling

 $^{^{54}[66,} p.131]$

function Jeshion, claims that "... insofar as mental files serve as vehicles for bundling together an agent's fund of information about a particular individual, they provide an economical and efficient means of sorting, retrieving, and adding information on a particular individual."⁵⁵ This function highlights the cognitive role of mental files as stable stores of information that subjects employ to package together information concerning an individual.

As noted by Jeshion, most accounts of mental files only recognize the identity and bundling function. In addition to these, Jeshion posits the singular-function and claims that "[t]hinking about an individual from a mental file is constitutive of singular thinking about that individual."⁵⁶ Jeshion's justification for mental files having a singular-function is derived from research on the perception of objects and the positing of "object files".⁵⁷

As a thesis about ST, Cognitivism consists of two component claims. One concerning the *nature* of ST and the other concerning the *condition* for having ST. They are below presented as specified by Jeshion [67, pp.82–83].

Nature: Singular thinking about individuals is thinking of them through an object or mental file.

Significance Condition: a mental file is initiated on an individual only if that individual is significant to the agent with respect to her plans, projects, affective states, and motivations.

As specified by *Nature*, Jeshion offers a *bare* mental files account of ST—there is nothing more to having a ST than to have a thought *via* deployment of a mental file. In essence, *Nature* is a restatement of the singular-function of mental files. Positing the singular-function, or *Nature*, goes a step beyond Recanati's view in that one may have STs concerning objects with which they are not acquainted, do not expect to be acquainted, nor will ever be acquainted. This results in giving up singularity markers (**v**) and (**vi**). But, in addition, the nuances of Jeshion's view commit her to further giving up on singularity marker (**ii**).

⁵⁵[66, p.131]

⁵⁶[66, p.132]

⁵⁷See Pylyshyn [105][106] and Scholl and Pylyshyn [123].

The is owing to Jeshion's endorsement of Donnellan's distinction between referential and descriptive uses of descriptions.⁵⁸ And so, Jeshion permits that sentences containing only descriptions as both subject and predicate may express singular propositions rather than merely occasion a singular proposition *via* some pragmatic effects. If this is so, some of our STs concerning an object do appear to be satisfactional in nature; this requires giving up on (ii) *directness*. The Cognitivist mental files conception of ST is represented in *Table 6*.

Co	gnitivist Mental Files	ST
i	Name-like-syntax	\checkmark
ii	Directness	×
iii	Object-involving	\checkmark
iv	Acquaintance	×
v	Object-dependent	×
vi	Know-wh	X
vii	De-re-report	×
	Table 6	

The upshot of Jeshion's acquaintanceless conception of ST is that it may accommodate purported cases of ST that Recanati's cannot. In fact, it is precisely those cases where acquaintance does not or could not obtain—this includes ST had using empty names and those that are about an object that, even if it in fact exists, our anticipation to become acquainted with it is never satisfied. Moreover, given that ST is a kind of mental state, Cognitivism directs discussion of the nature of ST as something constituted by some underlying cognitive processes. Insofar as we are interested in giving an account of the mind in terms

⁵⁸Jeshion [67, p.86] It is worth pointing out that in this piece Jeshion introduces conditions named 'objectinvolving', 'non-descriptive', and 'direct' to characterize the traditional Russellian view of ST, and to make trouble for the view by pulling these conditions apart, however these conditions are not understood in the way in which we have characterized them here. Jeshion's use of 'object-involving' roughly maps onto our condition (v) *object-dependent*; her use of 'direct' is closer to our use of (iv) *acquaintance*; and her use of 'non-descriptive' roughly maps onto our use of (ii) *directness*.

of the underlying cognitive processes that give rise to mental states, Cognitivism directs our attention on the appropriate mark.

1.4.2 Liberalism

Liberalist views of ST are those which present very limited constraints on the having of ST, and thereby posit them in abundance. The representative example of Liberalist ST is the position presented and defended by Hawthorne and Manley [57]. Whereas Mental File Frameworks reorient the discussion concerning ST towards cognitive processes and are motivated in great part by the empirical legitimacy they purportedly accrue from cognitive psychology and linguistics, Liberalism approaches theorizing about ST primarily by appeal to linguistic analysis.

The reason that Hawthorne and Manley take the avenue of linguistic analysis is largely due to the longstanding tradition of characterizing ST in terms of bearing an attitude towards singular contents. Since singular contents are often taken to be those that are expressed using referential expressions, there is a way to bridge the gap between characterizations of ST and language by attending to those thoughts we ascribe using referential expressions. This procedure for theorizing about ST is one that we are particularly sympathetic to, since our practices involving the explanation of intentional action by appeal to thought ascription are highly successful and are so in the absence of any theoretical knowledge concerning the inner goings-on of a subjects cognitive architecture.

One point where we depart from Hawthorne and Manley's attitudes for the appropriate framework for theorizing concerning ST is regarding the metaphysics of propositions. It is often the case theorists theorizing about ST endorse realism about propositions and are thereby provided a way to characterize singular contents in terms of singular propositions (as we have often done in this overview). Yet, Hawthorne and Manley highlight a few challenges for directly characterizing singular contents in terms of singular propositions; where singular propositions are understood as Russellian.⁵⁹

The first is a puzzle concerning constituency. If Socrates is a part of the Rusellian proposition expressed by 'Socrates is a philosopher', then what is the relevant notion of constituency? It cannot be parthood, for parthood is transitive and parts of Socrates are not constituents of the proposition expressed by the mentioned sentence. The second puzzle is that something may be a constituent of the content expressed by a sentence even if that thing is not referred to by an element of the sentence. For, the property being a *philosopher* is a constituent of the proposition expressed by the mentioned sentence, but the sentence is not taken to express a proposition that is singular with respect to that property; in opposition, one might accept that 'Philosopherhood is a desirable feature' is a sentence that expresses a proposition that is singular with respect to the property being a philosopher. Hawthorne and Manley agree with us that these challenges might be met. At the least, they do not seem to be knock-down problems for appealing to the metaphysics of propositions. Moreover, we think that using resources available to characterize contents in terms of the metaphysics of propositions has plausible utility in constructing a theory that tells us what makes some thought a ST by bearing an attitude towards a content with a particular structure. Our reliance on the metaphysics of propositions for theorizing about ST will become more apparent in Chap. 2.

Given that Liberalism posits *ST* in abundance, a defining feature of the view is that it rejects any form of acquaintance constraint; Hawthorne and Manley take considerable time considering various acquaintance constraints that may be adopted and present purported counterexamples to those constraints. Although they often characterize Liberalism negatively as an anti-acquaintance position, in addition, they introduce two theses they find intuitively plausible in order to argue in favor of Liberalism, HARMONY (HAR) and SUFFI-CIENCY (SUF), [57, p.38]:

⁵⁹See Hawthorne and Manley [57, pp.14–15]

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.

SUF: Believing a singular proposition about an object is sufficient for having a singular thought about it.

Although HAR and SUF are not introduced by Hawthorne and Manley as positive characterizations of Liberalism, discussions of Liberalism often appeal to them as the defining commitments of Liberalism. A slight adjustment to HAR and SUF might better characterize the variety of Liberalism that Hawthrone and Manley endorse; that is, one not characterized in terms of singular *propositions* but in terms of singular *contents*. Hawthorne and Manley more brusquely characterize the Liberalist view of ST as "...to be a singular thought is to be a cognitive attitude toward a singular content: viz., a content of the sort expressed by sentences containing referential expressions." [57, pp.247–248]. If Liberalism is understood this way, the the crux of the position is how we ought to understand the category of referential expressions, since they will be our guide to which appropriate thought attributions are those which attribute ST.

Much of Hawthorne and Manley's discussion is therefore dedicated to carving out the semantic class of referential expressions. Ultimately, they conclude that none of the expressions typically characterized as referential—names, demonstratives, indexicals, and pronouns—fit the traditional criteria for reference; perhaps only very few expressions, such as 'I', count as genuinely referential when considered under the light of compositional semantics. This severely limits the usefulness of appeals to reference in discussions of ST. So, Hawthorne and Manley end by suggesting that, for reference to contribute to the theoretical development of ST, perhaps reference ought to be better understood as it is used in ordinary language. Or otherwise, one may identify the bearers of reference with singular restrictors that may be covert and represented at the level of LF (logical form) to which linguists appeal. Liberalism may be represented with the following table.

Liberalist ST		
i	Name-like-syntax	?
ii	Directness	\checkmark
iii	Object- $involving$	\checkmark
iv	Acquaintance	×
v	Object-dependent	×
vi	Know-wh	X
vii	De-re-report	?
	Table 7	

Since Liberalism, as positively characterized, connects the having of ST with thought attributions that include referential expressions, it will turn out that ST will satisfy (ii) under the supposition that referential expressions are about their objects non-satisfactionally, as well as (iii) since the truth of the thoughts attributed will depend on the how the objects are that are referred to using the referential expressions contained in the thought attribution.

The markers (i) Name-like-syntax and (vii) are left as open on the Liberalist account as their satisfaction depends on how those markers are to be further interpreted. If Name-likesyntax is interpreted as a thesis about the expressions used within attributions of ST, then (i) will be satisfied. However, if it is interpreted as a thesis about some underlying cognitive vehicle that bears the content of the ST, then it won't be satisfied as Liberlaism does not commit to such vehicles. Likewise for (i), if *De-re-reports* is interpreted as a *semantic* thesis as discussed in §1.2.2, then Liberalism will satisfy (vii); if interpreted as either as syntactic or metaphysical thesis, Liberalism will not satisfy (vii).

The upshot of Liberalism, to our mind, is first that it accommodates many of the purported cases of ST; similar to Cognitivism, it permits ST absent acquaintance that many find intuitively plausible. Moreover, Liberalism makes no claim to the underlying nature of the cognitive architecture that realizes ST. Ultimately, the position we defend will be one that may be understood as a variety of Liberalism, but that appeals to a more developed metaphysical structure of content in order to explain puzzles that arise in the face of positing ST.

1.4.3 Justificatory Convergence

The final prominent position to consider for contemporary theories of ST, and perhaps the newest developed position in the literature, is the epistemic account developed by Imogen Dickie [27]. The view has often been discussed under the label of 'cognitive focus' and is referred to by Dickie using either that expression or the expression 'justificatory convergence'. The uniqueness of this view is its focus on providing an epistemic account of aboutness-fixing which is relational and taken to be the distinguishing feature of ST. Seeing that Dickie's view is distinctively epistemic, we shall refer to it using the 'Justificatory Convergence' nomenclature to in order to highlight its epistemic basis and set it apart from the particularly cognitive emphasis of Mental Files Frameworks, and in particular, Cognitivism.

The lynch-pin of Dickie's Justificatory Convergence theory of ST is the claim that what distinguishes ST and general thought are rationality constraints that govern the beliefs regarding some object (or purported object) o. Dickie provides their official version of what it is for beliefs to be about an object in their *Reference and Justification* thesis (R+J) [27, p.212]:

A body of *ordinary* $\langle a \rangle$ beliefs is about *o* iff its proprietary means of justification converges on *o*, so that, for all $\langle \Phi \rangle$, if R+J: S has proprietary rationality-securing justification for the belief that $\langle a$ is $\Phi \rangle$, this justification eliminates every rationally relevant circumstance where *o* is not Φ .

This thesis requires some unpacking. Here Dickie uses $\langle a \rangle$ as a schematic variable ranging over those conceptual representations of objects that a subject deploys in thought; $\langle a \rangle$ beliefs are just those the beliefs that a subject would typically use a particular singular term a to express—where a ranges over singular terms in natural language.

On this account, what makes a belief $\langle a$ is $\Phi > a$ ST is that the subject's proprietary-

rationality securing justification for it eliminates all rationally relevant circumstances where the object o picked out by $\langle a \rangle$ is not Φ . Of course, this is little more than a restatement of R+J; we need to further unpack 'proprietary justification' and 'rationally relevant circumstances'.

Proprietary justification is the 'trumping' route to justification for a body of ordinary beliefs; meaning that it is the route that takes precedence when justifying a subject's beliefs in that body. For example, if upon seeing a tree, a subject S forms the beliefs that the tree is large, that the tree is a pale grey, and that it has many leaves, the proprietary route of justification is perceptual experience. Further, S may receive testimony from an arborist fellow onlooker that the tree is dying and thereby form the belief that it is dying; yet if Sapproaches the tree and carves out a large portion of the trunk to discover that it is lush and flourishing, the justification acquired from this perceptual route will trump the justification received through testimony and S's beliefs will be appropriately modified.⁶⁰ Now, regarding rational relevance, some circumstance c is rationally relevant to the formation of some belief (during a period of time) just in case the belief is rational only if it is formed by a route that eliminates c; a belief is rational just in case it is formed by a careful justification conferring route, i.e., one that eliminates many circumstances where the belief is false.⁶¹

Once we put all of this together we arrive at the Justificatory Convergence theory of STlaid bare. Some particular belief $\langle a \ is \ \Phi \rangle$ is singular with respect to an object o just in case that belief belongs to a body of ordinary $\langle a \rangle$ beliefs and that body of ordinary beliefs is about o. Crucially, R+J provides us those conditions for specifying what it is for a body of ordinary $\langle a \rangle$ beliefs to be about o; it is just in case that, for all $\langle \Phi \rangle$, the justification that S has for $\langle a \ is \ \Phi \rangle$ is derived from the justificatory route that takes precedence over (or 'trumps') all others and, in addition, this justification eliminates those circumstances where o is not Φ that, if left as an open possibility, would undermine the belief's being rational (i.e., the justification eliminates those circumstances where the belief

⁶⁰Dickie [27, p.51]

⁶¹Dickie [27, p.42]

is false and that are among the many that would be eliminated by a careful justification conferring route).

Dickie applies R+J when considering whether there are STs concerning objects who have their aboutness properties fixed by description. To illustrate the point, they offer the example of '*Tremulous hand*', a case that delivers putative examples of ST which have their aboutness properties fixed by description, [27, p.212].

'Tremulous Hand' is used by medievalists to refer to the otherwise unidentified author of around 50,000 thirteenth-century glosses in manuscripts. Palaeographical analysis provides strong evidence that these glosses are the work of a single person with distinctive (tremulous and left-leaning) handwriting. All that is known about Tremulous Hand is what can be deduced from the glosses.

Now suppose some subject S forms a body of beliefs while rifling through the literary glosses that they would express using sentences containing 'Tremulous Hand' as the subject expression. Dickie offers three detailed examples. We reproduce just one here [27, p.213]:

S finds, putting multiple glosses together, a level of detailed knowledge about some historical event of the kind normally possessed only by eyewitnesses or those with access to comprehensive eyewitness accounts, and concludes that Tremulous Hand either witnessed the event, or did not witness it directly but had access to the testimony of someone who did.

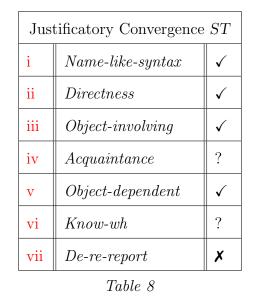
To express their belief they have arrived at, S may simply use the sentence,

(5) Tremulous Hand or someone they knew witnessed event e.

Suppose further that S's body of so-called <Tremulous Hand> beliefs are also formed with appropriate justification of this sort. What makes it the case that the belief S has which they would express using (5), and the body of beliefs that it belongs to, are singular with respect to some particular o? It is because the body of beliefs *justificatorily converge* on o, in the sense that if o is not the unique author of the glosses, it is merely a matter of S being unlucky. That is, S is not rationally required to consider circumstances that would undermine the beliefs taken individually; e.g., S is not rationally required to consider the

circumstance in which the author of the glosses *just so happened* to describe a fictitious scenario with properties that perfectly overlap with those of event e.

The following table represents commitments of the Justificatory Convergence theory of ST.



An important commitment of Dickie's is that genuine *aboutness* for an object o is never satisfactional—it is always relational. Owing to this, commitment, Dickie's Justictifcatory Convergence theory must be committed to markers (ii), (iii), and (v). Commitment to (i) appears to follow from the use of a representational framework the treats constituents of thought as concepts, some of which are singular concepts and characterized by their name-like-syntax. Possibly, this commitment could be excised by simply exchanging mental representation talk with talk of the expressions an agent would use to express their thoughts; however, then commitment to (i) might be interpreted regarding the syntax of the expressions subjects use to express their STs. Whether the Justificatory Convergence view is committed to (iv) or (vi) is disputable. Dickie does not characterize their position as one that requires acquaintance, but upon an appropriately broad reading of that constraint one could argue any view which treats ST as essentially relational is one at least minimally committed to a liberal acquaintance constraint. Additionally, having the appropriate body of beliefs required to justificatorily converge on some object o might strong enough to entail know-wh of o. This will also ultimately depend on how know-wh is understood; very strict conditions for knowwh, such as being able to perceptually distinguish o from other objects would not be always satisfied on the Justifiatory Convergence view. However, a weaker understanding of knowthat is satisfied by being able to discriminate an object by appeal to a unique body of beliefs a subject has concerning o is entailed by Jutificatory Convergence.

There is much to say about Dickie's novel treatment of ST, but with limited space we shall limit our remaining comments to some features that distinguish it from other views and which impress upon our own. Although Justificatory Convergence permits descriptively fixed aboutness for ST, one benefit of Dickie's view is that it permits a moderate version of the *Instrumental Thesis* that many would find intuitive, but does not allow semantic instrumentalism to run rampant—an objection from which Liberalism suffers. Whether a ST may be introduced by 'the stroke of a pen' depends on the epistemic connection the subject entertaining the thought has to the o the thought is about. Some thoughts, like those had by S concerning Tremulous Hand permit a move from general thought to ST by introduction of the name 'Tremulous Hand', and this is owing to S's justificatory convergence on the individual. Yet, Dickie's theory does not seem to allow Kaplan's case of 'Newman 1' or Evan's 'Julius'—in these cases there is simply not enough information to generate a set of beliefs upon which justificatory convergence occurs.

The interesting feature of Dickie's theory that we would like to highlight, and also find a compelling as an under-explored fact about our mental lives, is that belief comes packaged together in bodies of certain kinds. This is supposed to be a fact also captured by Mental Files Frameworks, but mental files themselves are often treated as repositories of information rather than sets of beliefs of a particular type. Dickie's view is interesting in that what makes some particular belief about some o is ultimately determined by the set of beliefs that it is packaged with. Because of this, the discussion of what it is for a thought to be a ST in the Justificatory Convergence theory is somewhat cumbersome to phrase, since it is ultimately

derived from R+J which is stated in terms of bodies of beliefs. Our position on ST to be presented in the next chapter is not one that places as strict epistemic constraints on ST as R+J, however, bodies of beliefs thought of as individuated by semantic coordination relations will play an important role in the development of our position.

Concluding Remarks

The aim of this chapter was primarily to introduce the readers to the notion of ST. In so doing, we hoped to have illustrated the number of overlapping discussions from various philosophical disciplines, the complexities surrounding those discussions, and disputes concerning ST.

We began in §1.1 by motivating the claim that there appears to be no obvious way to neutrally characterize ST in a manner that doesn't commit to features that are controversial. Whether we attempt to analyze ST using a *bottom-up* strategy by considering representative examples of ST and abstract from those examples purported necessary and sufficient conditions for ST, or whether we begin by using a *top-down* strategy and analyzing the meaning of the constituent expressions 'singular' and 'thought' to arrive at a general characterization of ST, we either result with a controversial characterization of the notion or a characterization that provides little illumination as to the phenomenon under consideration. After considering these strategies and found them wanting, we introduced and unpacked markers of singularity introduced by Sainsbury [120] to guide our discussion and characterize positions taken historically throughout the rest of chapter.

In §1.2 we took considerable time to introduce ST as originally fashioned by Russell. This involved characterizing many of Russell's commitment that led to the initial theoretical positing and characterization of ST. Following the discussion of Russell, ST was discussed in relation to the DD / DR distinction in order to pull these notions apart, since they are often conflated. To finish up the early analytic discussion, we discussed Strawson's *Transcendental* Argument for the necessity of ST to both illustrate the importance of constructing an adequate theory for it, and to introduce what we (and others) find to be a compelling theoretical role ST is traditionally intended to play; namely, putting us in contact with objects in the world, or otherwise put, providing us a *cognitive grip* on individuals external to us.

\$1.3 provided an overview of positions concerning ST as they developed out of Russell and into the 'heyday' of analytic philosophy of mind. The two primary focuses were discussing ST as distinguished by the kinds of *content* it has and the introduction of the metaphor of 'mental files' to explain a variety mental phenomenon related to ST. The importance of this section was to bridge the gap between how ST was understood, and the role it was intended to play, by Russell and later analytic philosophers, and how it is understood and deployed in the contemporary.

The last section, §1.4, canvassed the variety theories of ST held in the contemporary. The predominant view, or that which is given the most attention, is some variety of Mental Files Framework. This has resulted in a shift from thinking about ST as distinguished by the kind of content that underpins the thought and towards theorizing about the vehicles of content; this shift is a result of focusing the discussion on STs cognitive role understood in terms of internal goings-on. Liberalism about ST is a view that may still be appropriately treated as among *content* views of ST with a shift in focus to semantic content while remaining non-committal regarding the metaphysics of content understood as propositional. The most recent position we have discussed as Justificatory Convergence highlights the epistemic underpinnings of ST and draws strong connections between the aboutness of thoughts directed towards objects and epistemic constraints governing agents. Each of these contemporary positions have varying methodological approaches and theoretical concerns, which underscores the difficulty in neutrally characterizing ST.

In the next chapter, we focus on developing our own position on ST that adopts some of the motivations, methodologies, and explanatory goals, of each of the contemporary views and dispenses with others.

Chapter 2

A New 'Orthodox' View

Introductory Remarks

Our aim in this chapter is to develop a novel position on singular thought [ST]; one which we think is closely aligned with the older, predominant theories that developed out of Russell. The view we shall defend is under the larger umbrella of views we have been calling 'content views'; it is a view that distinguishes ST from non-singular thought by appeal to the contents of the respective mental states; as opposed to say, having the right kind of representational vehicle or bearing some causal or epistemic relation to an object.

In Chap. 1 we introduced a variety of contemporary theories concerning ST: Mental Files Frameworks, Liberalism, and Justifactory Convergence. These theories differ greatly between their methodological approaches for theory development, central explanatory concerns, and general philosophical commitments. Of course, there is no shortcoming of criticisms to be found for any view, but we shall not spend much time critiquing these positions. Rather, as our position is developed it should become clear how it overlaps with and departs from the other theories on offer, and we shall highlight these points as we proceed. In our final chapter, Ch. 4, we shall argue that the substantive differences among different theories of ST is to be expected, and that this doesn't (of necessity) require that we reject some theories in favor of others.

The current chapter will unfold in the following manner. In §2.1 we begin by discussing the guiding assumptions we are entering with for development of our theory. Given that ST is so thoroughly embedded across philosophical disciplines, we must get clear about what we take for granted which guides theory development. Following that, in §2.2 we shall distinguish two important questions that theories of ST typically address to structure our discussion for developing our theory, and introduce some additional guiding constraints. §2.3 will be the most significant section in which we develop our content based theory of ST that is influenced by the historical works of Russell and Strawson, work on singular propositions espoused by Braun [10][12], and the relationist views of Fiengo and May [35], Fine [36], and Heck [58][59]. We will then conclude with a brief summarization of our position.

2.1 Starting Points

To begin constructing a theory of *ST* we now specify some background assumptions that guide our theorizing. Each of these assumptions we take to be either *prima facie* highly intuitive or, at the least, have an established philosophical pedigree. Many of these assumptions will have been briefly touched upon in Ch.1, but we shall spend some time elaborating on them and providing motivation for their endorsement.

The first assumption concerns commitment to the indispensability of folk psychology as it pertains to the explanation of intentional action; we shall label this the *Folk Psychology Indispensability Thesis (FIT)*.

(i) *FIT*: The platitudes of folk psychology are indispensable for the explanation of intentional action.

We follow Lewis [84] in understanding the platitudes of folk psychology to be roughly those platitudes concerning the causal relations of mental states and their action outputs; moreover they are common knowledge. For example, one such platitude is that if you believe there is beer in the glass in front of you and you desire to drink beer, then you will pick up and drink from the glass in front of you. This does not express a commitment to the functional analysis of mental states *per se*, but merely that there are many commonly known truths concerning the connections between mental states and action that are known and deployed by anyone competent with the mentalistic expressions of a language. Importantly, commitment to folk psychology provides a metaphysical basis for the kinds of states STs are taken to be: those ordinary mental states we discuss by using expressions like 'belief', 'desire', and so on.

We take *FIT* to be an intuitively plausible thesis—even as far as to claim that it may be appropriately included among the realm of *Moorean facts*. The platitudes of folk psychology are so ingrained in our understanding of the world and our conception of ourselves as minded beings that the rejection of folk psychology wholesale would require a fundamental reconceiving of what it is to be a minded creature in the world. As such, any theory that entails the denial of *FIT* is one that, all things being even, ought to be rejected.

Our second assumption concerns the appropriate way to arrive at an understanding of the commitments delivered by folk psychological posits. Along with an extensive tradition within analytic philosophy, we take it that oftentimes our metaphysical commitments are delivered by the best semantic analysis of our language use; in particular, in the philosophy of mind our metaphysical commitments concerning mental states can be arrived at by analyzing the truth-conditions for the language used to attribute and report folk psychological states. Call this the *Semantics to Metaphysics Bridge* (SMB).

(ii) SMB: Semantical analysis of the terms in a sentence delivers our metaphysical commitments when asserting the sentence.

Commitment to *SMB* dovetails with commitment to *FIT*. Given that folk psychological platitudes are common knowledge and compose our folk theory of mind, they are prime candidates for the relevant objects to be investigated to further develop a theory of mind. Moreover, if folk psychology is indispensable and semantical analysis is an appropriate guide

to metaphysics, then semantic analysis of sentences used to express folk psychological attributions, reports, and platitudes will be an appropriate methodology for determining our commitments concerning the nature of the mind.¹ For example, consider the following sentence.

(6) Jerome believes that Mr. Porgy is hungry.

(6) will be true just in case Jerome believes that Mr. Porgy is hungry. A standard analysis of such a sentence would treat 'Jerome' as used to refer to the individual Jerome, 'believes' as introducing the BELIEVES relation, and 'Mr. Porgy is hungry' as used to refer to the proposition that Mr. Porgy is hungry.² Thus (6) is true if and only if Jerome stands in the belief relation to the proposition that Mr. Porgy is hungry. Such an analysis commits to a folk theory of meaning in which the meaning of a term is its reference. We need not make this assumption, generally, but will assume referentialism with respect to proper names, demonstratives, and indexicals as outlined in Chap. 1, and use it to analyze the meaning of sentences taken as a whole. FIT and SMB taken together have as a plausible outcome what is sometimes called the relational analysis of attitude ascriptions, according to which attitude ascriptions, such as 'S Vs that p', are true just in case the subject S stands in the appropriate attitudinal relation V to the proposition that $p.^3$

We accept the relational analysis of attitude ascriptions; it is properly included within our third assumption. The third assumption is that propositions are the semantic objects expressed by sentences and with which subjects are related to in thought; call this *Propositionalism about Thought and Language (PTL)*.

¹Of course, this is a variety of what Strawson [132] refers to as *descriptivist* metaphysics, as opposed to *revisionist* metaphysics.

²Here we use uppercase small text for BELIEVES to indicate we are referring to a concept (understood as an abstract object) or universal.

 $^{^3 \}mathrm{See}$ McGrath and Frank [92] for further discussion.

Propositions serve as the semantic objects that are the

(iii) *PTL*: primary-bearers of truth-values that language use expresses and with which subjects are related to in thought.

PTL has it that propositions are the common semantic object to which we are related in thought and language use. This assumption has an intuitive appeal given our ordinary understanding of connections between thought and language. For instance, consider a timeworn example that motivates commitment to propositions as objects of thought and language. Fritz, a monolingual German speaker reports a belief with the sentence "Schnee ist weiss"; likewise Tom, a monolingual English speaker reports a belief with the sentence "Snow is white". From these two reports, with some knowledge of both languages, we may conclude that both Fritz and Tom say and believe *the same thing*. Namely, that snow is white. Yet if they say and believe the same thing, then there is something that is said and believed, and that is a proposition. There are, of course, different ways to explain the agreement between Fritz and Tom, e.g., taking a Davidsonian approach in which Fritz and Tom are 'samesayers', but to get such a picture to work appropriately we need to do some fancy footwork. As such, propositionalism lends itself more readily as an explanation of the phenomenon.

The fourth assumption we shall make is Russellianism about propositions. This will be labelled *Russellian Structured Propositions* (*RSP*).

(iv) RSP: Propositions are constituted by structured sets of objects and properties.

Commitment to structured propositions has an established philosophical pedigree beginning in Frege and Russell, and carried on today in the works of Braun [10] [12], Soames [129][130], Salmon [121], and King [78], among others. Much of the contemporary motivation for structured propositions is in response to failings of possible worlds accounts of propositions. Moreover, commitment to structured propositions is partly motivated by the same considerations that historically motivate introduction of ST; namely, commitment to certain expressions being directly referential. Possible worlds semantics seems to blur the distinction between propositions expressed by directly referential expressions and rigid descriptions. For example, 'Aristotle was a philosopher' and 'The actual first tutor of Alexander the Great was a philosopher' would express the same proposition on a possible worlds framework, but not on a structured proposition view. For our current purposes it is enough to note that communent to structured propositions, Russellian or otherwise, is often treated as a required ticket to entry for developing any view of ST that draws the singular and non-singular distinction at the level of content.⁴

Our fifth assumption is Millianism about referential expressions; so we assume that referential expressions serve merely to 'tag' the objects they are used to refer to and that such expressions contribute those objects to the propositions that sentences containing them express; call this *Referential Object Contribution*.

Referential expressions contribute the objects with which

(v) ROC: they are used to refer to the propositions expressed by sentences containing those expressions as constituents.

ROC has been the subject of many discussions within the philosophy of language since Kripke's [81] revival of Millianism about proper names. As discussed, this assumption also dovetails with RSP. It is commitment to ROC that provides motivation to adopt a structured account of propositions.

With these five assumptions in place, we may naturally arrive at the orthodox content based picture of ST that many find intuitive, given their philosophical proclivities, and is derived from broadly Russellian commitments about thought and language.⁵ Armstrong and Stanley [4, pp.205–206] specify the view in the following way:

Intuitively, a singular thought about an object o is one that is directly about o in a characteristic way—grasp of that thought requires having some special

 $^{^{4}}$ For further discussion of motivations for structured propositions and different treatments of them see King [79].

⁵We borrow the language of calling it the 'orthodox view' from Crane [20].

epistemic relation to the object o, and the thought is ontologically dependent on o. One very common account of the nature of singular thought assumes what we shall call a Russellian Structured Account of Propositions, according to which contents are represented by means of structured n-tuples of objects, properties, and functions. A proposition is singular, according to this framework, if and only if it contains an object as constituent.

By FIT and SMB we are committed to the semantic analyses of folk psychological reports to reveal commitments about the metaphysics of mind. In combination with PTL, we are committed to many mental states being, in part, relations to propositions. By RSP such propositions are structured sets, and by ROC any sentence that correctly reports a mental state with a referential expression embedded in the *that*-clause of the report will reflect that the subject occupying the state is related to a proposition with an object as constituent, i.e., a singular proposition. Given that many of our folk psychological reports contain such expressions in the *that*-clause, we are committed to there being mental states with singular propositions as contents; mental states with singular propositions as contents appear to be prime candidates for being STs as reflected in the passage from Armstrong and Stanley.

In general, we accept something in the spirit of the orthodox content based view, but which is more relaxed in certain respects and more committal in others; e.g., our position will require some additional specification and modification to account for thoughts about nonexistent objects and, perhaps, fictional entities. For now, we settle with the specification of the orthodox view to set the stage for continued discussion of the theory of ST we endorse that is content based and presented in §2.3.

2.2 Questions Concerning Singular Thought

Many accounts of ST are committed to some variety of acquaintance constraint, either epistemic or causal. The account we endorse is one that departs from tradition by rejecting any kind of acquaintance constraint and thereby amounts to a form of *Liberalism* like that of Hawthorne and Manley's [57] described in Chap. $1.^{6}$ More shall be said about this in due course. What we wish to now highlight is that the question of whether acquaintance is required for a subject to have some particular ST is only one question that may be addressed when giving an account of ST; i.e., it is a question concerning what conditions are required for the having of a ST rather than a question concerning the nature of or what is constitutive of ST. This distinciton is reflected in Jeshion's [67] Significance Condition and Nature. It will be helpful to restate these two theses from Chap. 1 that Jeshion [67, pp.82–83] provides for their account of ST.

Nature: Singular thinking about individuals is thinking of them through an object or mental file.

Significance Condition: a mental file is initiated on an individual only if that individual is significant to the agent with respect to her plans, projects, affective states, and motivations.

The import of these two theses is that they reflect the theoretical importance of keeping separate these two questions:

- (a) What features constitute the singularity of thought?
- (b) What conditions must be met for a subject to have a thought that is singular?

Jeshion's Significance Condition is an answer to (b) and their Nature claim is an answer to (a). These two questions are often run together; to give a complete account of ST it is worth keeping them separate, since one may give consistent accounts that answer each in different ways. For instance, one might agree with Jeshion's Nature claim, but disagree with their Significance Condition by claiming instead that mental files are only initiated when a subject is acquainted with an object.

Once we distinguish (a) and (b) the answer we give to each may be stated rather minimally. Our simple response (to be elaborated upon) to (a) is the claim that a subject

⁶Liberalism is specifically described by Hawthorne and Manley [57, p.24] as the thesis that "there is no general acquaintance restriction on reference or singular thought..."

has a singular thought just in case they are related in thought to a singular content or singular proposition. What of (b)? To restate the question in light of our response to (a), what conditions must be met for a subject to be related in thought to a singular content or singular proposition? Our endorsement of a variety of *Liberalism*, provides a partial answer acquaintance is not among these conditions. But more generally, we wish to leave a positive response to this question open for the reason that we do not think a general account of STought to overly commit to any stringent architecture of the mind, and it is difficult to see, apart from imposing some acquaintance constraint, what other commitments unrelated to mental architecture would fit the bill to provide adequate constraints on a subject having a ST. Of course there appear to be many conditions that would be sufficient for a subject to be related to a singular content—like Russellian acquaintance or thinking via some 'singular mental file', i.e., a mental file that *directly refers* to some entity—but it is far less clear whether any are necessary.

Theory development in the ST literature seems to often presuppose some variety of the representational theory of mind (RTM), which is to be understood here as the claim that there are internal vehicles of content—mental representations—tokened in a subjects mind (or brain) which function roughly like a language of thought, i.e., having a combinitorial syntax and semantics along with those other features of natural language a theorist may take to provide explanatory benefits when accounting for features of mental phenomena. Appeal to mental files requires a view of this kind since mental files themselves are taken to be mental representations that play some unique cognitive role. Yet, whatever platitudes of folk psychology governing our mind-talk happen to be, they do not obviously require commitment to mental representations. For we ordinarily individuate our mental states by appeal to their attitude and their content, but not postulated internal vehicles of content that are inaccessible from the manifest image, to borrow a phrase from Sellars [125]. Consider example sentences (6)–(8).⁷

 $^{^{7}}$ By 'inaccessible' we do not intend the existence of vehicles of thought cannot be detected at all. Perhaps in the future we will have technologies so advanced that we will be able to detect internal representational

- (6) Jerome believes Mr. Porgy is hungry.
- (7) Jerome fears Mr. Porgy is hungry.
- (8) Jerome believes Tulip is hungry.

From the armchair, so to speak, (6) and (7) report distinct mental states in virtue of their reporting Jerome having different attitudes which relate him to the same content; 'believes' denotes the BELIEVES relation and 'fears' denotes the FEARS relation. As well, although (6) and (8) report Jerome having the same attitude, they are to be distinguished from one another in virtue of the contents to which they report the subject being related—(6) relates Jerome to the proposition *that Mr. Porgy is hungry* and (8) relates Jerome to the proposition *that Tulip is hungry*. And of course (7) and (8) are distinguished twice over, i.e., by both attitude and content.

The recognition that we ordinarily individuate mental states this way may have been a philosophical achievement, but that we do so is reflected in our ordinary folk psychological practices. What is not reflected in such practices is a commitment to there being representational vehicles, or internal constituents of thought, that are inaccessible to the layperson, which must be connected in some robust way to attitudes and thought contents. Appeal to mental representations as such is a plausible theoretical commitment used to explain certain cognitive abilities that we have, but not one that is required to take seriously our everyday successful practice of predicting and explaining intentional action by appeal to mental states.

Insofar as we want to provide a theory of ST that is as neutral as possible regarding particular theories of mind, we ought not couch it in terms that would immediately rule out any those theories of mind which reject representationalism. For instance, we should like our theory of ST to be, at minimum, compatible with a Davidsonian [24][25], Lewisian [85], or Dennettian [26] style of *interpretationism*; which does not posit the existence of mental representations, but explains the presence of intentional attitude states by appeal to patterns

vehicles. The important point is that such vehicles are not traceable to distinct patterns of behavior, language, or any other ordinary method that the layperson may have access to.

of observable behaviors that underpin our use of mentalistic language to make predictions concerning the mental states of others and their actions.

So, there are at least two ways in which one might respond to (b) that places conditions that must be met in order for a subject to have a singular thought. One way is to introduce an acquaintance constraint; our endorsement of *Liberalism* is a rejection of placing such a constraint. Another way is to introduce some constraints on the architecture of mind, such as commitment to a language of thought, but we also reject responding to (b) in this way; we shall call the position of remaining noncommittal to a particular mental architecture *Neutrality*. Both *Liberalism* and *Neutrality* are negative responses to (b). Is there a positive response we might give? Ultimately we do not think there is some general positive response to (b) that does not run afoul of either *Liberalism* or *Neutrality*, but we are open to suggestion. That being the case, we shall focus our discussion on more fully developing our response to (a); that is, to spell out a theory of *ST* as thought directed at singular contents or singular propositions, and which is able to handle objections usually pressed against such theories without appeal to acquaintance constraints or a particular kind of mental architecture. To this we now turn.

2.3 Singular Thought as Singular Content

Our theoretical goal is to construct a theory of ST that respects both *Liberalism* and *Neutrality*, as well as assumptions (i)–(v) specified in §2.1. Moreover, this is intended be a theory that improves upon the orthodox content based view specified by Armstrong and Stanley. To be sure, *Liberalism* commits us to departing with the orthodox view insofar as it rejects requiring a 'special epistemic relation' or a causal relation to the object (or objects) with respect to which a thought is singular. As we develop the picture, it will become clearer how we further depart from the orthodox view by also rejecting an unconditional requirement of object dependence, that is, we think there is conceptual room for certain STs to be object

dependent and others not.

2.3.1 Standard Object Dependence

The construction of our theory is partly motivated by objections to the orthodox view leveraged by Crane [20]. Crane's formulation and objection to the position is offered in the following passage.

The obvious advantage of the orthodox view is that it gives a simple explanation of what makes a thought *singular* rather than general. The orthodoxy explains the difference by saying that the thought ontologically depends on the existence of the particular objects it is about... The singularity of a singular thought is guaranteed by the thought having a content which either contains or is constitutively dependent on the particular object it is about. So if that object had not existed the content would not either, and neither would the thought episode.

[**20**, p.23–24]

According to Crane, the orthodox view is committed to the claim that the singularity of content *consists* in object dependence. We hope to show that this is not this case; we shall argue that a supporter of a modified orthodox view need not endorse this claim, but instead the weaker claim that object dependence is sufficient for singularity. Although we commit to a Russellian view of propositions, Crane's characterization of the orthodox view is also instructive in that it does not exclude theories of content which reject objects as constituents of content. With some massaging, the view we present here may satisfy a similar, more neutral understanding of the constituents of propositional contents.

The concern now becomes, why think that object dependence is a condition on singularity? One motivation for thinking that singular content must be object dependent is endorsement of some version of an acquaintance constraint. Of course, we do not need to decide here on the precise nature of acquaintance, but only note that whether it is an epistemic relation or a causal relation, acquaintance requires that an object exists with which one is acquainted. There can be no relation (epistemic, causal, or otherwise) that obtains between a thinker and an object that does not exist. Thus, if acquaintance is a necessary condition on the singularity of contents, then object dependence falls out as a necessary condition on the singularity of content since object dependence is a necessary condition on any acquaintance relation obtaining. However, we find the arguments of Hawthorne and Manley [57] against acquaintance in favor of Liberalism to be convincing. The following example plausibly reports a ST that is instructive in this regard.

(9) Nicolas believes tomorrow a war will be fought.

Many (ourselves included) find this to be a plausible case of a thought that is singular with respect to *tomorrow*. However, we have no causal contact with *that*, nor do we bear any sort of robust epistemic relation (e.g., a direct perceptual relation); although we might bear a weaker epistemic relation in having knowledge *of* tomorrow (e.g., knowing that there is a tomorrow). So to press the objection further, an example is required in which we lack even knowledge of the existence of the thing in question. Here we shall rely on the objection to the orthodox view that Crane leverages.

The objection that Crane presses against the orthodox view is one that is familiar in other areas of philosophy, e.g., within the literature on the semantics of proper names. The issue concerns how it is possible to have STs about some nonexistent object. Within the philosophy of language, the corresponding issue is regarding the semantic content of empty names, that is, (assuming referentialism about names) what is the semantic content of names without referents? Crane appeals to one of philosophy's greatest hits to generate the worry against the orthodox view: the example of Le Verrier and the planet Vulcan. As the lore goes, Le Verrier had previously discovered the planet Neptune. Using similar methods that resulted in this discovery, Le Verrier hypothesized that there exists a planet orbiting between Mercury and the Sun; Le Verrier named the presumed planet 'Vulcan.' In fact, there is no planet that orbits between Mercury and the Sun; hence, the name 'Vulcan' fails to refer. However, after the name 'Vulcan' was introduced, it is intuitively plausible that the individuals using the name were entering into discussion about Vulcan and having thoughts about Vulcan. Their thoughts appear to aim to refer to a particular object, in the same way that when we think about Neptune by entertaining 'Neptune is a planet' our thought aims to refer to Neptune. And so, it appears that Le Verrier and others had STsabout Vulcan.

Insofar as one accepts that Le Verrier had STs about Vulcan, the example provides a straightforward counterexample to the acquaintance constraint on ST. There is no object that Le Verrier is acquainted with such that Le Verrier's Vulcan thoughts relate him to that object, and therefore acquaintance could not be a condition on ST. Moreover, it provides an alleged counterexample to the object dependence condition on singular thought. If Le Verrier has a ST about some non-existent object (i.e., Vulcan), then it cannot be the case that Le Verrier is related to some singular content—understood as some content that has an object or object dependent sense as a constituent. This provides motivation to at once embrace *Liberalism* and reject the object dependence condition on ST, and thereby the view that singular contents are constitutive of the singularity of ST.

The move then, for Crane, is to shift attention away from singular contents to singular mental states. Instead of taking the singularity of ST to consist in the singularity of the contents of mental states, it consists in the singularity of those mental states themselves, which is to be explained independently of the singularity of their contents. The position Crane endorses he labels 'psychologistic'. He contrasts this view with the orthodox view in the following passage.

As explained above, the orthodoxy explains singularity in terms of features of content: the object of thought features in (is a constituent of, or is determined by) the thought's propositional content. The psychologistic approach, by contrast, explains singularity in terms of features of the representation (the thought episode) itself.

[**20**, p.36]

Since Crane's view shifts our attention away from the singularity of contents to the singularity of mental states, the singularity of ST will consist in some property of mental states that

is supposed to be independent of their content. An interesting feature of Crane's view is that singularity is a property of 'thought episodes' which is suggestive of occurrent mental states. It is not clear whether Crane wishes to restrict singularity to occurrent mental states, but most theorists, we believe, would not endorse such a view.⁸ For it rules out dispositional mental states from being STs. However, to align with Crane, it is not necessary to endorse a view according to which singularity is a feature only of occurrent mental states. Rather, it merely needs to be some property of mental states or their representations, or representational vehicles, that may compose them; at least, insofar as such a property is not necessarily a property of occurrent states.⁹

2.3.2 Relative Object Dependence

Faced with the objection from nonexistent objects that Crane leverages, the supporter of the orthodox view has several possible responses available. In allegiance to the object dependence condition as presently understood, one could, as it were, bite the bullet and deny that there are any STs concerning Vulcan. This position does not appear all that bizarre. A plausible line of thought has it that one can only have thoughts about objects that exist. *Aboutness*, one could maintain, is a relation that obtains between existents—the thinker and the thing thought about. Given that there is no planet Vulcan, there are no thoughts about Vulcan, singular or otherwise. Crane considers this position and offers this response.

I talk here of a thought being 'about' something non-existent, and that such thoughts fail to refer. I therefore distinguish (by stipulation) between aboutness and reference. Reference is a relation to an existing thing, by definition;

⁸Elsewhere, Crane [20, p.25] describes his psychologistic view as the view that "[s]ingularity is a matter of the cognitive—that is, the psychological or phenomenological—role of the thought." How the disjunction ought to be understood here is unclear. However, we might understand occurrent mental states as just those that have a particular phenomenology in virtue of being conscious. If singularity is a function of phenomenological role, then it is a feature only of occurrent mental states.

⁹On some ways of precisifying the notion of 'representation' the resulting view of ST will not count as psychologistic—for instance, if one thinks that propositions are the relevant representations. Yet, if 'representation' means something like a mental particular, a mental syntactical element in the *language of* thought (LOT), or bearer of content (i.e., representational vehicle), that is realized by states of brains or bodies, the resulting view may count as psychologistic insofar as being a ST is not a function of thought content.

aboutness is the mere representation of some thing in thought, whether or not it exists...It is possible to regiment our ordinary talk in a different way; one could insist that it is not possible for a thought episode to be genuinely *about* something non-existent, so aboutness must go with reference (see Bach [7]). But if one takes this view of 'aboutness' one will need some other way of describing what I call 'my thoughts about Vulcan'. Someone might say, for example, that the thoughts represent Vulcan, although they are not about it. I'd rather say my thoughts are about Vulcan, but they do not refer to Vulcan. I hope it is obvious that this difference is terminological.

[**20**, p.24–p25]

Although we grant that we ordinarily talk of having thoughts *about* Santa Clause, Pegasus, or Vulcan, we think that our commitments concerning these objects should force us to either take such talk literally or as short hand for something else. If we think that there are such objects as the planet Vulcan or Santa Clause, then we should accept that our thoughts *about* Vulcan and Santa Clause relate us to those objects. If we think that there aren't any such objects, then we ought to understand this talk as being analyzable in such as way that does not commit us to the existence of those objects. The various relations alluded to above (*aboutness, reference*, and *representation*) prima facie require some relata in order for them to obtain. One cannot refer to, represent, or talk or think about, that which does not exist. And so, if one takes the object dependence condition seriously for ST, one might deny that distinguishing reference from aboutness, as Crane does, makes any headway in avoiding the issue. Unless, ultimately, *aboutness* is to be analyzed as non-relational. Yet this is a demand needed to be met that has historically been shown difficult to accomplish.¹⁰

Instead of biting the bullet and denying the singularity of thoughts that are ascribed using names that fail to refer, we propose that we ought to be more careful about how we understand the object-dependence condition. Suppose we endorse the orthodox view. We maintain that the orthodox view (OV) ought to be understood in this way.

¹⁰One approach to analyzing aboutness non-relationally that may do some heavy lifting here is to treat aboutness contents as adverbial, e.g., Kriegel [80]; though this is not without objection. See, for instance Frank Jackson's [62] 'many property problem'.

OV A thought is singular if and only if it expresses a singular content.

Importantly, OV does not say that the singularity of thought content is all there is to a thoughts being singular, albeit it is a necessary condition. Rather, a thought is singular just in case it *expresses* a singular content. Once we have distinguished between questions (a) and (b) we see that giving a complete account of ST requires responses to both. The orthodox view is consistent with different responses to (b). However, a thought cannot have a singular content as its content if it does not *express* such a content. So any true attribution of a thought with a singular content will be one that satisfies both conditions. This is why the orthodox view is more concerned with the singularity of content: attributions of thoughts with singular contents, if true, will track the conditions required for the expression of such contents. That is to say, those attributions will only turn out to be true when the required underlying conditions are met for expressing singular content. Moreover, what it is for a thought to express some singular content will depend on an account of what it is to have mental states *per se.* We contend therefore that an orthodox view is not one that denies the importance of the story to be told about how STs are had; rather, it merely leaves the question open. And in particular, it is not the part of the analysis that the orthodox theorist is concerned with. Rather, they are concerned with providing a more fleshed out response to (a); on an orthodox view, this would be to further specify what is constitutive of the singularity of singular content.

With this framework in mind, one might also respond to the objection from STs about nonexistent objects by way of claiming that such thoughts do not meet the conditions to *express* singular content. But this appears implausible. In fact, it appears just the opposite. It is because such attributions appear to be true, and thereby the thoughts attributed meet the conditions for expressing singular contents, that makes trouble for the orthodox view.

To address the objection from thoughts about nonexistents and maintain the spirit of the orthodoxy, we must consider what is constitutive of the singularity of content. One way of understanding what is constitutive of the singularity of content we have already entertained: some content c is singular if and only if it contains some object or objectdependent sense as a constituent. This understanding makes the singularity of content *simpliciter* object dependent; i.e., there is no singularity of content absent some object that the content ontologically depends upon. If the orthodox view is to maintain this strong view, then the supporter must admit that propositional attitude attributions containing empty names do not attribute singular thoughts concerning the purported referent of the nonreferring term. As an alternative, we may endorse the weaker principle, *relative dependence* $(RD).^{11}$

RD *A* content *c* is singular with respect to some object *o* if and only if *o* is a constituent of *c*.

Notice that *RD* tells us when a content is singular *with respect to* some object. *RD* states when object dependence is relevant to the singularity of content: when some object exists that is a constituent of the content. However, this condition does not tell us what the singularity of content is *simpliciter*. That is to say, as we conceive of things, object dependence is a condition on singularity only if there is some object that the content is about. If there is no object that the content is singular with respect to, then the content cannot be singular with respect to any object, but this does not entail that the content is not itself singular. What we require is an account of what is constitutive of the singularity of content *simpliciter*.

2.3.3 Gappy Contents

To give an account of singular content that permits contents to be singular without there being an object as a constituent of the content, we will appeal to the notion of gappy*contents* as developed by Braun [10][12]. In addition, in order to avoid commitment to any particularities of mental architecture, we will weave a theory of gappy content together a with

¹¹A Fregean version of RD only requires changing having o as a constituent of c to having a sense dependent on o being a constituent of c.

a theory of *content relationism* in §2.3.4. The resulting view is one that will satisfy conditions (i)-(v) that we have laid out, as well as *Liberalism* and *Neutrality*. Since our position is one that avoids paying the cost of committing to a particular mental architecture, it will have to make up for the theoretical explanatory benefits had by appealing to mental architecture elsewhere. The trade off is that we must be more committal with respect to the nature of structured contents.

Braun's motivations for introducing gappy contents, or as he calls them 'unfilled propositions', is to resolve a number of issues related to singular content within the philosophy of language that overlap with issues in the philosophy of mind. One motivation is the problem we have been considering about the the possibility of having thoughts about nonexistent objects. He labels this *The Problem of the Proposition Believed*. Not oddly enough his example case also has to do with beliefs concerning Vulcan, and he usefully states the problem in a way that relates it to our commitment *FIT* and the *disquotation principle* (See Kripke [81]).

... if Fred has no belief "corresponding" to his sincere utterance of 'Vulcan is a planet', how could he be sincerely uttering that sentence? How could his action (his uttering the sentence) possibly be explained?

[10, p.452]

An ordinary way to explain Fred's action of uttering the sentence 'Vulcan is a planet' is to appeal to his belief that Vulcan is a planet and his desire to express that belief. But, of course, this requires that Fred has a belief to express and which is a cause of his utterance. So it must be the case that Fred has some belief that he would express using the sentence 'Vulcan is a planet'. But if 'Vulcan' fails to refer and thereby there is no object for his belief to be about, what content could Fred be related to in thought that explains his sincere utterance?

There are two further problems that motivate Braun's introduction of gappy content; both are closely related to *The Problem of the Proposition Believed*. One problem is *The Problem of the Proposition Expressed*. Simply put, propositions are understood as what we say when we use a sentence. If singular contents are object dependent, then if we use an empty name, we fail to express a proposition. In this case, when Fred says 'Vulcan is a planet', he fails to express a proposition since 'Vulcan' fails to refer. Yet certainly Fred says something. The other problem Braun calls The Problem of Differing Cognitive Values. The issue concerns having distinct beliefs that would be expressed using different empty names. For instance, if Fred utters 'Vulcan is a planet' and also utters 'Pegasus is a winged horse' and both of these sentences say nothing (because they fail to express propositions), then how do we explain the fact that Fred seems to be reporting two distinct beliefs? If we individuate belief by appeal to their contents, yet an agent is not related to a proposition in the having of a belief, then either they fail to have a belief altogether or merely have one ST with the content that is the null set. In this case, Fred either expresses no belief, which makes it puzzling why he would utter anything at all, or Fred has a single belief that explains both utterances, which makes it puzzling why he would be disposed to utter distinct sentences.

To resolve all three issues, Braun settles on a notion of gappy content. In particular, he maintains that empty names have no semantic value, i.e., there is no object that they contribute to the proposition expressed by sentences containing them. Yet the sentences containing empty names do express a semantic object—a gappy content. This requires acknowledging a commitment to the reification of propositional structure and thereby a *hylomorphism* about propositions. Braun recognizes this.

The theory of structured propositions recognizes that there is something more, namely, a *structure*: a proposition consists of a structure, along with individuals and relations. On this view, a proposition consists of *two different kinds of entities*. There is first of all its structure, which is an entity that might be compared to scaffolding or, even better, a tree. This structured entity contains positions or "slots", ready to be filled with individuals and relations. The rest of a proposition consists of individuals and relations.

[**10**, p.461]

We follow Braun in this regard and the view we shall endorse is one that treats contents as hylomorphic entities consisting of both structures and individuals and relations. There is an important related question as to how we identify the structure of a proposition. The view that we hold is in the same spirit as Braun's. Propositional structures are identified by revealing the appropriate *deep syntax* or *logical form* of the sentences used to express a proposition.¹² Of course, what the appropriate logical analysis may be for a given sentence is highly contentious and such questions cannot be resolved here. Suffice it to say that these analyses will consist of identifying logical structures containing slots that are to be filled with individuals and relations. We will represent the structures, just as Braun sometimes does, using Russell's preferred method of structured sets.

At this point, we have enough resources on the table to resolve two of the problems that Braun introduced; namely, *The Problem of the Proposition Believed* and *The Problem of the Proposition Expressed*.

First, we may say that the proposition expressed by a sentence containing an empty name is one that is gappy, that is, it has an unfilled slot that an individual would be slotted into had the sentence a subject would use to express the proposition contained a nonempty referring expression. So, when Fred utters 'Vulcan is a planet' he utters a proposition with the following Russellian structure.

$\langle \langle _ \rangle, being-a-planet \rangle$

Where the ' $\langle _ \rangle$ ' represents the unfilled slot in the proposition that the planet referred to by 'Vulcan' would have occupied had the term 'Vulcan' referred.

Second, we may say that Fred's belief that he is reporting when he utters the sentence 'Vulcan is a planet' has that same content. So at once we can say the belief that explains Fred's uttering the sentence 'Vulcan is a planet' and the proposition which is expressed by that sentence have one and the same content; this preserves the disquotation principle and resolves the two stated problems.

 $^{^{12}}$ In particular, Braun identifies syntactic trees as being the relevant objects to represent a sentences syntax. We remain neutral on the precise way to go about this. Yet we must recognize that the structures identified will be dependent on the best syntactic analysis for some language, and so may shift depending on the language analyzed.

This leaves only *The Problem of Differing Cognitive Values*. As the gappy content view has so far been specified, it still falters with this issue. It is clear that Fred's belief that he would express by uttering sentence 'Vulcan is a planet' and the belief that he would express by uttering the sentence 'Pegasus is a winged horse' will have distinct gappy contents,

$$\langle \langle _ \rangle$$
, being-a-planet \rangle

represents the former and,

 $\langle \langle _ \rangle$, being-a-winged-horse \rangle

represents the latter. However, if it were the case that Fred did not assent to 'Pegasus is a winged horse' and instead held the belief he would express with 'Pegasus is a planet', then the contents of his Vulcan-belief and Pegasus-belief would be identical. That is, the contents of each would be represented with the same gappy content:

$$\langle \langle _ \rangle$$
, being-a-planet \rangle

And this shall not do, because even if one has a belief concerning a nonexistent object that it has some property, one ought to be able to have a distinct beliefs concerning different nonexistent objects that attributes each the same property. That is, Fred ought to be appropriately be said to have two beliefs, one that explains his uttering 'Vulcan is a planet' and one that explains his uttering 'Pegasus is a planet'. Given our limited commitment to individuating beliefs by their contents (and attitudes), we are left, at this point, with Fred having a single belief that he would utter distinct sentences to express. But it is puzzling, in this case, as to why he would use two sentences to report the same belief—intuitively it is because he in fact has two beliefs.

Braun's overall solution to this is to appeal to the fact that Fred has two distinct mental states, but he is rather non-committal as to what distinguishes these states. Once we distinguish mental *states* from their contents, he claims, we are in a position to say that it is possible for Fred to have two distinct beliefs states with the same gappy content which have distinctive causal profiles. That is, one belief state brings about an utterance of the sentence 'Vulcan is a planet' and the other brings about an utterance of the sentence 'Pegasus is a planet'. To offer an explanation of how this could be the case, Braun appeals to a language of thought style of mental representation, in which to have a belief expressing a certain proposition is to token a sentence-like structure in 'one's head', as it were. If we accept that one could believe the same gappy content above twice over with distinct empty mental representations in their language of thought, then we are in a position to distinguish their belief states even though they express the same content.

Of course, we should also like to accept Braun's general conclusion that we can distinguish Fred's mental states, however commitment to *Neutrality* prevents us from saying that this is explained by distinct mental sentences, containing distinct empty mental representations, tokened in Fred's head. To retain the commitment to Fred's having two belief states, we must fall back on our ordinary way of individuating mental states from the folk position, namely, *via* their attitude or their content. And since both of Fred's states are *beliefs* and appealing to internal mental representations to distinguish attitudes that are otherwise the same is to violate *Neutrality* by building more into Fred's mental architecture, we opt to build more into the content of the mental states themselves. Such that Fred's 'Vulcan' beliefs and 'Pegasus' beliefs relate him to distinct gappy contents. To accomplish this, we will adopt a version of relationism that we call *content relationism*.

Put simply, the view we endorse will distinguish gappy contents that otherwise have the same individuals and properties as constituents. To do so, we shall represent the gappy content expressed by the sentence 'Vulcan is a planet' by treating the slot that the referent of 'Vulcan' would occupy were the term to refer as being distinguished by an index.

$\langle \langle __1 \rangle$, being-a-planet \rangle

Likewise, the content of the the sentence expressed by 'Pegasus is a planet' will be represented

with a distinct index.

$\langle \langle \underline{}_2 \rangle$, being-a-planet \rangle

The indexes here are used to represent the fact that the reified propositional slots are of different types; in particular, the indexes represent that the slot is coordinated with any other slot with the same index.

In some ways, this resembles the picture defended by Fiengo and May [35]. However, their view is that the accrual of distinct indexes in formal positions is a function of expression types as syntactically individuated. From the subject's perspective, expressions have different indices in virtue of the subject's belief concerning the expression type. That is, Fred has beliefs concerning the reference of 'Vulcan' and 'Pegasus' such that he takes them not to co-refer. These beliefs play a role in distinguishing the referents of 'Vulcan' and 'Pegasus' for Fred, such that in some cases he will use the expression 'Vulcan' to express one of his beliefs and the expression 'Pegasus' to express the others. Although we agree that subjects certainly have these kinds of linguistic beliefs and that they often play a role in their mental lives and linguistic behavior, such beliefs may not be necessary to distinguish beliefs that may otherwise be coordinated; for it is plausible that someone may be confused about the identity of an object that their beliefs concern, and take the world to contain distinct objects when it does not, even if they have no language that names these objects. The easiest maneuver to resolve *that* confusion would be, again, to adopt some additional mental architecture by appealing to mental representations that explains the ability to enter into this kind of mental fragmentation absent a natural language, but this is precisely that which we wish to avoid.¹³ Ultimately we take our position to be consistent with the relationist view that Fiengo and May develop, however we have different explanatory goals in mind. Here we are concerned with giving a theory of singularity of content *simplicter*; Fiengo and May are concerned

¹³We use the phrase 'mental fragmentation' to describe when subjects have segregated bodies of belief two bodies of belief that they take to be about distinct objects, but are actually about one. For example, Lois Lane's body of beliefs about Clark Kent are fragmented, since she has a segregated body of beliefs about Superman, even though Clark Kent and Superman are identical.

with analyzing *de lingua* beliefs, generally, and their theoretical importance in thought and communication.

2.3.4 Bodies of Belief, Content Relationism, and Content Coordination

The proposal we offer is developed by appeal to the notions of content relationism and content coordination, along the lines discussed by Fine [36]; and a notion similar to a *body* of beliefs as deployed by Dickie [27].¹⁴ We claim that the content of Fred's Vulcan-belief and the content of Fred's Pegasus-belief are distinguished by the body of beliefs they belong to; in turn, these bodies of belief are individuated by the coordination relations that obtain among the contents of the beliefs which belong to them and results in their having distinct relational content.¹⁵ Fine [36, p.3] specifies his semantic relationist thesis stating,

... the fact that two utterances say the same thing is not entirely a matter of their intrinsic semantic features; it may also turn on the semantic relationships among the utterances or their parts which are not reducible to those features. We must, therefore, recognize that there may be *irreducible* semantic relationships, ones not reducible to the intrinsic semantic features of the expressions between which they hold.

This semantic relationist thesis may be adapted to apply to the contents of thought by taking thought content to have irreducibly contentful features that obtain owing to relationships born out between contents. The primary relation Fine is concerned with is *coordination*; which is understood as the strongest relation of synonymy—or sameness of content.¹⁶ Recently, Goodman and Gray [51] have argued that coordination among contents, along with a metasemantic thesis about the grounds of these coordination relations, can be used to give

 $^{^{14}{\}rm Fine}$ initially develops semantic relationism and semantic coordination and then goes on to apply them to thought.

 $^{^{15}}$ Although the position we shall describe is couched in terms of belief states, we take it to generalize to all contentful mental states, i.e., it is more appropriate, but less simplistic, to discuss *bodies of thought* and the coordination of contents of thought, generally.

 $^{^{16}}$ See Fine [36, p.5]

an account of *mental filing*. This is an account that does the theoretical work mental files are intended to do without appealing to the file metaphor.

In providing their account, they address two ways in which the relational thesis for contents may be cashed out. One way is by appeal to the relations obtaining among sentence-like mental vehicles, which is the position we set aside. Another way is to make the assumption that propositional content is structured:

If an agent's total attitude state can be decomposed into a collection of relations to Russellian propositions then we can distinguish object-representations in terms of *occurrences* of objects in Russellian content of an attitude state.

[**51**, p.9]

(Emphasis added)

To arrive at the content relationism we endorse, we need to only add the assumption we have been making that *occurrences*, or slots, are reified and able to stand in coordination relations independently of whether objects occupy those slots. Moreover, we take relations of content coordination to be primitive and individuative of the coordinated slots. It is a brute fact that some contents stand in coordination relations to others; in turn, the identity conditions of these contentful structures is in part determined by coordination relations among them the relations individuate contentful slots—in addition to the individuals and properties that occupy content slots. This is the thesis of content relationism.

We are now in a position to clarify our use of *bodies of belief*. Although Dickie is somewhat noncomittal about what makes it the case that a particular belief belongs to some body of ordinary beliefs concerning some individual o, it is plausible that they have in mind a representationalist position; wherein some belief B belongs to a body of beliefs Φ that are singular with respect to some individual o just in case B has as a conceptual constituent a mental representation $\langle a \rangle$ that refers to o, and all other beliefs within Φ concerning odeploy that same representation $\langle a \rangle$. Alternatively, one might define bodies of belief in terms of different sorts of mental particulars, i.e., mental files. Where B belongs to some body of beliefs Φ concerning *o* just in case *B* is 'in the *o* mental file'. In either case, bodies of beliefs are distinguished by some kind of mental particular—a mental representation or a mental file.

Instead we shall take a *body of beliefs* to be the more fundamental notion to which particular beliefs must always belong and by which they are individuated. We ordinarily individuate belief states by appeal to their contents and individuation of their contents is done by appeal to the contents' constitutuents—by appeal to the individuals and properties that make them up. Having accepted a hylomorphism about content, contents are additionally individuated by appeal to their structures, and those structures may contain empty slots that an individual may occupy. Moreover, individuation of a slot itself will be done by appeal to the coordination relations that obtain among it and other contents. The underlying assumption here is that beliefs *always* come packaged in a set, i.e., a body of belief. This is reflected by a general commitment to a minimal form of holism about mental states *á la* Davidson [23, p.96]:

Just as we cannot intelligibly assign a length to any object unless a comprehensive theory holds of objects of that sort, we cannot intelligibly attribute any propositional attitude to an agent except within the framework of a viable theory of his beliefs, desires, intentions, and decisions.

This just to say that mental states hang and fall together. Perhaps not as broadly as Davidson has in mind, but our willingness to attribute one belief to a subject brings with it a commitment to attribute a web of connected intentional states of some complexity. For our purposes, the import is that having a ST concerning an individual (or purported individual) requires having some number of other STs that concern that individual. And even if a subject refrains from forming very many beliefs about some individual, if they are in position to have a ST about that individual, then they are also must be in a position to entertain many other thoughts about that individual in accordance with the concepts they possess. If (6) is true, such that Jerome has a ST concerning Mr. Porgy being hungry, then Jerome ought to also be in the position to entertain the thought that Mr. Porgy desires food, and the thought that Mr. Porgy will feel relief upon eating, and so on.

A body of beliefs, we shall stipulate, is a set of belief states that hang together in virtue of coordination relations that obtain among their contents. Some belief B belongs to a body of beliefs Φ just in case B expresses a content containing a slot that is *content coordinated* with the slots of contents expressed by other beliefs among the body. Let's consider the classical example of Cicero and Tully. Perhaps Chaucer is under the impression that 'Cicero' and 'Tully' refer to distinct individuals such that these attributions are true.

(10) Chaucer believes Cicero is a Roman.

(11) Chaucer believes Tully is an orator.

At first, Chaucer does not recognize that his beliefs he would express using the name 'Cicero' are about the same individual as the beliefs he would express using the name 'Tully'. So, initially, he is in a 'fragmented' state of mind in which he takes his use of the name 'Cicero' to be referring to an individual distinct from the one he refers to using the name 'Tully'. But, as a matter of fact, Cicero = Tully, and so his beliefs are about a single individual.

Thus, at the outset, we say that Chaucer's belief reported in (10) and his belief reported in (11) are not coordinated. We may represent this using indexes when representing the content of his beliefs in the following way.

- (10*) $\langle \langle \underline{c}_1 \rangle$, being-a-Roman \rangle
- (11*) $\langle \langle \underline{c}_2 \rangle$, being-an-orator \rangle

Although the contents of Chaucer's belief represented in (10^*) and (11^*) both contain the same individual, Cicero, represented by c, those contents have distinct slots that Cicero occupies, as indicated by the underlining and subscripts, $(\langle __1 \rangle)$ and $(\langle __2 \rangle)$. Moreover, even if Chaucer came to believe that Cicero is an orator, but fails to recognize that Cicero = Tully and retains his fragmented state of mind—holding that 'Cicero' and 'Tully' refer to distinct

individuals—he will gain a belief that is coordinated with the content represented in (10^*) but not coordinated with the content represented in (11^*) . The content of this belief would be represented as:

 $\langle \langle \underline{c}_1 \rangle$, being-an-orator \rangle

And supposing (*per impossible*) that these were the only beliefs Chaucer had, he would have two distinct bodies of belief.¹⁷ One body with a slot that the individual Cicero occupies which has as members beliefs with the contents, $\langle \langle \underline{c}_1 \rangle$, *being-a-Roman* and $\langle \langle \underline{c}_1 \rangle$, *being-an-orator*. And one degenerate body of beliefs that contain beliefs with a slot, distinct from the slot contained among the other body, that Cicero occupies. And this body contains only a belief with the content, $\langle \langle \underline{c}_2 \rangle$, *being-an-orator*; and which we may say, for expository purposes, is coordinated with itself.

To fill in the theory in more detail, we shall help ourselves to an abundant view of coordinated contents. So, we assume that, independent of speakers and thinkers, there exists a veritable Platonic heaven of propositional structures that may be distinguished, in part, by the coordination relations that obtain among them. The bodies of belief that Chaucer has are distinguished by which sets of coordinated contents he latches on to, even if he does not latch on to every member in the set. In the limited case specified, Chaucer only has two bodies of belief that are collectively exhausted by three individual belief states, and these bodies are distinguished by the coordination relations of the contents of those belief states. However, the contents of his beliefs are in fact content coordinated with an indefinite number of further contents; which may or may not become contents of Chaucer's beliefs (if he were to latch on to them), and enter into his bodies of beliefs that are in turn individuated by appeal to the coordination relations themselves.

To return to the *Problem of Differing Cognitive Values* we may now resolve this puzzle by appeal to Fred's Vulcan-beliefs and Fred's Pegasus-beliefs having distinct contents in

¹⁷Strictly speaking, in the 0-ary case of coordination (having a single belief that is not content coordinated with any others) there is no singularity.

virtue of those contents having distinct unfilled slots that are individuated by appeal to their coordination relations. As before, Fred's belief he would express uttering 'Vulcan is a planet' would be represented with an indexed slot,

$$\langle \langle __1 \rangle$$
, being-a-planet \rangle

and the belief he would express uttering 'Pegasus is a planet' would be represented with a distinct indexed slot,

$\langle \langle \underline{}_2 \rangle$, being-a-planet \rangle

The roll of the indices is to tell us that these slots are *different slots*, and thus the content of these thoughts is distinguished by their having distinct unfilled slots. As should now be clear, the slots are distinct in virtue of their relational properties, namely, the set of contents they are coordinated with.

2.3.5 Singular Content Simpliciter

The development of the theory of content based ST thus far began by assuming an orthodox view of ST along with additional commitments to *Liberalism* and *Neutrality*. The orthodox view was then reformulated in a way that doesn't require object-dependence (OV), but relativizes singularity to an object if it is in fact a constituent of the thought content (RD). The question then became, if object-dependence does not tell us what makes a thought content singular, what does singularity of content consist in? That is, what is singular content *simpliciter*?

What we have arrived at is a position that treats propositions as hylomorphisms; one that reifies slots within propositions that objects may occupy. And so, we arrive at the slot view of singular content (SV):

 $\frac{A \text{ content is singular if and only if it contains a slot}}{\text{that an object may occupy.}}$

Taken together with OV we get our version of the content based view of singular thought (*CB-ST*):

CB-STA thought is singular if and only if it expresses a content that contains a slot that an object may occupy.

There are many further questions that may be raised concerning the theory. For instance, what is it for a slot to be one that an object *may* occupy? This requires further theoretical work, but intuitively, what it is for a slot to be one that an object may occupy is for it to be a slot that can only take an object as a value.¹⁸ What distinguishes slots as such, we leave open, but a slot having this feature is plausibly a function of the overall structure of the proposition.

It's important to note the theory developed thus far leaves open questions about how quantifiers and variables are to be understood. We don't think anything in particular hangs on such considerations and expect that there is way to massage our view to fit various theories, but consideration of such thorny issues must be treated elsewhere. Moreover, we wish to highlight that there are two questions that may become confused:

- (i) What is it for a thought to be singular?
- (ii) What is it to have the same singular thought as opposed to a different one?

We have focused here giving a response to (i). But the view developed largely leaves (ii) untouched.

An additional question that seems particularly salient is whether unoccupied slots can become occupied and *vice versa*. Suppose the usual story of Le Verrier is as told. And he

 $^{^{18}}$ To use some Fregean speak, we might say slots as we are thinking of them only take *saturated entities*.

utters the sentence, 'Vulcan is a planet'. The ST he expresses will have the gappy content that may be represented:

$\langle \langle __i \rangle$, being-a-planet \rangle^{19}

And now suppose that Le Verrier is magically transported to a world, exactly as our own, save the fact that there really is a planet that satisfies all (or most) of the properties Le Verrier attributes in his set of beliefs that are coordinated with his 'Vulcan' indexed slots. That is to say, if Le Verrier *had been* theorizing in *that world* all along, he would have had the belief with the content,

$\langle \langle \underline{v}_i \rangle$, being-a-planet \rangle

along with many other beliefs about Vulcan which contain Vulcan in a filled slot. We may ask (of the real Le Verrier), upon being transported, does the content of Le Verrier's beliefs he would express using the name 'Vulcan' shift from the gappy content to the content that contains v as a constituent? Although this is quite similar to typical content shifting cases that are discussed in literature of mental content externalism, it is suggestive of a deeper question that may be posed to our content based view of ST—what is the relationship between occupants of slots and the slots they occupy? To phrase the question metaphorically, when (and how) do slots *reach out* and *grab* objects to occupy them?

One way to respond to the content shifting case is to say that the content of Le Verrier's belief does not change upon transporting. Rather, he retains the gappy thought content, until perhaps, he has causal contact with Vulcan, or otherwise enters into some kind of informational relation with the planet, and the content begins to shift over time. And so, the slots 'grab' an object when subjects stand in appropriate relations to that object. But this response eases one back towards accepting some minimal form of acquaintance for having

¹⁹Here we use the i'_i subscript to indicate that it is a coordination index; i'_i may be treated as a variable that takes a numerical value which distinguishes the index as coordinated with other slots that receive the same value.

a *ST* about an object. *Prima facie* this is a violation of *Liberalism*. But having defined the singularity of singular content in terms of the presence of a slot that an object may occupy, there is room to cleave *Liberalism* into two theses. One would be a thesis about whether there are any acquaintance constraints on having a thought content with a slot; and the other would be a thesis about whether there are any acquaintance constraints on a content slot being occupied by an object.

Another response may be that slots in propositions have assignment functions that 'grab' objects for them and which are grounded by their coordination relations. Such that gappy contents become occupied in any world in which there exists an object that the assignment function picks out. In that case, Le Verrier's Vulcan-beliefs gain a constituent when he is transported to the world where 'Vulcan' is nonempty. We find this thesis attractive, since it provides room for specifying how Le Verrier's Vulcan-beliefs are about Vulcan even in the ordinary case where there is no planet: it is precisely because Le Verrier's thought content has a slot that Vulcan would occupy had it existed.

However, a further puzzle for this kind of response is what we call an *inverted fragmentation* case. That is, a case where the subject takes there to be one object when there are in fact two. On the view put forward, in an inverted fragmentation case the subject will have coordinated thought contents that are filled by distinct objects. For example, suppose the following attributions are true.

- (12) Jerome believes Mr. Porgy and Tulip are identical.
- (13) Jerome believes Mr. Porgy is round.
- (14) Jerome believes Tulip is angry.

But if, as a matter of fact, Mr. Porgy and Tulip are distinct objects, then we should want to say that (13) and (14) have coordinated contents with distinct objects occupying the slots that are coordinated, and represented as such: (13*) $\langle \langle \underline{p}_i \rangle$, being-round

(14*) $\langle \langle \underline{t}_i \rangle$, being-angry \rangle

Yet, if it were the case that assignment functions are determined by coordination relations alone, then the assignment functions should be the same for the contents represented in (13^*) and (14^*) , since they are coordinated among the same contents. But in that case the same object should fill the '___i' slots in each content. Yet that would be to misrepresent the content of Jerome's beliefs; so it cannot be the case that slots have their assignment functions determined merely by relations of coordination.

As things stand, we are at an impasse. Either acquaintance is rejected wholesale and content slots have their assignment functions intrinsically—perhaps as a matter of brute fact—or some limited version of acquaintance must be accepted. A version in which having an ST that is singular with respect to an existing object requires a relation that plays the role of 'grabbing' objects and 'placing' them in slots. However, a third option may be available. We shall gesture at this option, but submit that it requires further consideration.

In Lewis [84] we are given a story of a detective presenting his theory as to who killed Mr. Body. In the story, we are introduced to the alleged perpetrators known only as X, Y, and Z (introduced as placeholders for the unknown criminals). Through the telling of the tale, Lewis proposes that we understand the meaning of X, Y, and Z functionally, i.e., *via* implicit functional definition that is determined by the roles that X, Y, and Z, are supposed to play in the tale. In addition, suppose it is discovered that Plum did all of the things X was described as doing, Peacock did those of Y, and Mustard those of Z. If so, we would be in a position to identify X, Y, and Z with Plum, Peacock, and Mustard, respectively. And we would say that the detective's theory was *about* Plum, Peacock, and Mustard since they are the unique realizers of the roles in the theory. However, if it is discovered that in fact there was not some unique triple of criminals that committed the crime, but perhaps a sextuplet (or more) of criminals, we should want to say the detectives theory was incorrect, and that it failed to be about anyone in particular.

Akin to Lewis's story we might say that in cases of inverted fragmentation what often results is a subject being related to gappy contents. On this view, the assignment function of a slot will be individuated by appeal to the properties that are predicated of the slot's presupposed occupant. If there is no unique object that has all (or most) of those properties, then the slot remains unfilled—it fails to be about an object. Thus in the case of Jerome, it would be a mistake to represent his thoughts about Mr. Porgy and Tulip having distinct objects as constituents, since they would fail to have any object. However, if we make the additional assumption that Jerome *is* acquainted with both objects on different occasions and merely is unable to distinguish between them, then we shall want to say this relation 'trumps' the assignment function as determined by coordination relations of content slots and the properties associated with them; perhaps the assignment function is then determined relationally—such that (13^*) and (14^*) are accurate representations of Jerome's thought contents.

Concluding Remarks

In this chapter, we developed an account of ST that bases the notion in the content of the thought. Our motivations for taking this approach are specified by the five assumptions we began with: (i) the Folk Psychology Indispensability Thesis, (ii) the Semantics to Metaphysics Bridge, (iii) Propositionalism about Thought and Language, (iv) Russellian Structured Propositions, and (v) Referential Object Contribution. In addition we specified Neutrality and Liberalism as further constraints to develop our view. What results is a view of ST determined by thought content and which permits ST about nonexistent objects. As compared to the positions discussed in Chap. 1, our Content Based Singular Thought may be represented with the following table.

	Content Based ST	
i	Name-like-syntax	×
ii	Directness	\checkmark
iii	Object- $involving$	\checkmark
iv	Acquaintance	×
v	Object-dependent	×
vi	Know-wh	×
vii	De-re-report	×
	Table 2	

Although this position requires further development, we hope to have showed that there is room for a plausible content based view of ST that does not commit to any particular mental architecture and is consistent with other plausible theoretical constraints.

Chapter 3

An Analyticity Heuristic for Singular Content

Introductory Remarks

Much attention has been paid to the necessity and role of singular propositional content across the philosophical spectrum. Forceful arguments have been given in favor of the necessity of singular contents in order to capture modal properties of propositions, the semantic behavior of indexicals and demonstratives, and the ability to successfully refer to individuals.¹ In addition to arguments in favor of the existence of singular content, it has been deployed in philosophical theorizing across a wide range of disputes; in particular, throughout metaphysics, philosophy of language, epistemology, and philosophy of mind. In contrast, less attention has been given to how to correctly characterize what is constitutive of some content having the property of being singular, or how one might identify when a proposition

¹For an overview of these arguments see Fitch and Nelson [38].

The modal arguments have been adapted from Kripke [82], the indexical and demonstrative arguments are advanced by Kaplan [75] and Perry [99][100][101][103]. The arguments concerning the possibility of reference, i.e., reduplication arguments, are adapted from Strawson [132] and are rehearsed in Ludwig [87] and Glick [46].

expressed in language or related to in thought has the property of being singular.²

We discussed the former issue in the previous chapter. In this chapter, we take up the latter task in the form of providing a heuristic for determining whether some sentence expresses a propositional content that has the property of being singular.³

To do so, we appeal to the notions of *espistemic* analyticity developed by Boghossian [8][9] and that of *analytic entailment* espoused by Thomasson [135]. In short, one may understand epistemic analyticity as that property of a sentence that justifies a speaker in taking the sentence to express a truth; analytic entailment may be understood, initially, as those entailments which a competent speaker of a language is in a position to recognize on the basis of their logical reasoning and knowledge of the meanings of expressions in their language.

To illustrate our heuristic as an instance of analytic entailment, consider the proposition expressed by the following sentence on some occasion of use:

(15) Abraham Lincoln was assassinated.

Under any ordinary understanding of singular propositional content, (15) would be taken to express a singular content. Namely, it expresses a content that is singular with respect to Abraham Lincoln. Now consider the proposition expressed by (16),

(16) The assassin of Abraham Lincoln was an actor.

Whether (16) expresses a singular proposition is up for dispute. Plausibly, however, (15) is analytically entailed by (16). An agent that understands an utterance of (16) is poised to infer the truth of (15) in virtue of knowing the meaning of the sentences. We might render the inference as a conditional claim as in (17),

(17) If the assassin of Abraham Lincoln was an actor, then Abraham Lincoln was assassinated.

 $^{^{2}}$ Glick [46], notwithstanding, is a recent attempt to characterize a metaphysically neutral account of singularity.

³Here we use initially the expression 'sentence' to refer to a sentence taken together with a context.

This conditional plausibly renders the analytic entailment between (16) and (17) as a sentence that is intuitively an analytic truth.

However, we wish to highlight, we do not need to rely on purported cases of analytic truths qua conditional sentences in order to develop our heuristic. We will oftentimes appeal to such conditionals as a simple way of getting across that an analytic entailment holds between the sentential clause in the antecedent and the sentential clause in the consequent—i.e., we do not intend to make any substantive claims about how to regard English conditionals; they are only used in some cases to avoid consistent clunky phrasing. To this end, we shall stipulate sentences of the form 'If p, then q', if treated as expressing an analytic truth, are to be read as translatable into sentences of the form "p' analytically entails 'q'", and thereby sentences containing conditionals regarded as analytic truths ground out in claims about analytic entailments.

With that stipulation in place, we additionally claim that if (17) is an analytic truth, and (15) expresses a singular proposition, then (16) expresses a singular proposition. This is our heuristic test. Put simply, for any sentence ϕ , if ϕ analytically entails a sentence ψ and ψ uncontroversially expresses a singular proposition, then ϕ expresses a singular proposition. The underlying thought is that, in order for ϕ to entail a sentence ψ that expresses a singular content, it must itself be singular, since one cannot infer a content that is singular from *purely* general content alone.

In §3.1 we discuss the distinction between metaphysical and epistemic analyticity, Thomasson's characterization of analytic entailment, and specify how Thomasson's notion on analytic entailment may be understood epistemically and adapted for our purposes. Following that, §3.2 develops in more detail the analyticity heuristic, the justification for the heuristic, and substantiates how it performs the task of determining whether certain sentences express a singular content. Finally in §3.3 we discuss the limits of the heuristic and its appropriate application.

3.1 Varieties of Analyticity

The notion of analyticity has been fraught within philosophy ever since Quine's [108] infamous attack on the analytic/synthetic distinction and the response offered by Grice and Strawson [53]. The most significant work on analyticity since that time has come from Boghossian [8][9], Gillian Russell [117][118], and Juhl and Loomis [69]. Our discussion focuses on the work of Boghossian and the notion of analytic entailment discussed by Thomasson [135] since we borrow materials from each to construct an epistemic account of analytic entailment that provides the resources needed to explicate our heuristic for determining whether a sentence expresses a singular content. To this end, in this section we begin by discussing the distinction between *epistemic* analyticity and *metaphysical* analyticity as introduced by Boghossian. We then discuss Thomasson's characterization of *analytic entailment* and relate it to Boghossian's epistemic account of analyticity.

3.1.1 Metaphysical and Epistemic Analyticity

Analyticity, in slogan form, is canonically specified among philosophers as "truth in virtue of meaning".⁴ The slogan form of the notion, although often useful shorthand to gesture at the kind of thing under discussion, is hopelessly and notoriously vague; and so a key part of specifying a developed notion of analyticity is to provide an elucidation of the key notions appealed to in the slogan. So we begin developing a clearer notion by taking some time to unpack the slogan.

It is standardly understood that sentences, statements, expressions, or utterances are the objects to which the property of *being analytic* may apply. These expressions are used in a variety of ways but, with respect to analyticity, the relevant notion they converge on is either *a sentence taken together with a context* or *the use of a sentence on an occasion*; we will begin by treating the relevant objects as the former and will appeal to the latter in the final section. So, we shall use often use 'sentence' for short, but may use the other expressions

⁴Hence the title of Gillian Russell's [117] book on the subject, Truth in Virtue of Meaning.

interchangeable on occasion. In Ch. 2 we made the assumption that propositions are the primary bearers of truth-value; so the property of *being analytic* may broadly be applied to other entities that bear the relevant relation to a propositional content of a certain sort. But this invites the objection: if propositions are the primary bearers of truth-values and also taken to be the meaning of a sentence, does it not follow that *any* sentence that is true will be analytically true? For their meanings *qua* propositional contents are the very objects which ground the truth values of the sentences that express them. If so, the notion of analyticity is vacuous since it applies universally to true sentences—that is, there would be no distinction between sentences that are true and sentences that are analytically true.

In order to avoid the objection, perhaps we ought to introduce an appropriately specified *metaphysical* notion of analyticity; this is a notion of analyticity that would vindicate *conventionalism*—understood as the view that necessity is grounded in lingusitic convention.⁵ A response to the vacuity objection may be that "truth in virtue of meaning" is intended to be understood as the claim that the truth of a sentence is fixed *exclusively* by the content it expresses and not owing to any facts of the world. Thereby not every sentence that is true will turn out to be analytically true, because some subset of true sentences will be those which are sensitive to worldly facts (excluding the meaning facts). The analytically true subset would be those sentences which are only sensitive to facts about meaning. One immediate objection to this view is that it invites conflating analyticity with necessity (i.e., conventionalism is false) since there are alleged counter examples presented by sentences that are plausibly both analytic and contingent. For instance, Kaplan's[76] example sentence "I am here now" is true any time it is uttered, but it is not true of necessity.

However, even if we set aside the contingent analytic, avoiding analytic universalism by appeal to a simple version of metaphysical analyticity doesn't get the defender of the notion far. The objection of vacuity from universality is similar in spirit to an objection originally posed by Harman [55] that Boghossian [8] highlights.

⁵See Sidelle [127][128] for a thorough defense of conventionalism.

... what is to prevent us from saying the truth expressed by "Copper is copper" depends in part on a general feature of the way the world is, namely that everything is self-identical.

[55, p.128]

Harman's objection is also one that results in vacuity, though coming from the opposite side of the coin. Analyticity isn't a vacuous notion because *every* true sentence is true in virtue of meaning, but rather because *no* sentence is true *merely* in virtue of meaning. For any given true sentence, its truth is partially grounded in its meaning and partially grounded in (non-meaning) facts in the world. The combined objections—the threat of analytical unviersalism and the threat of analytical nihilism—present a two pronged attack on analyticity understood as a metaphysical notion that, taken seriously, require a defender to perform some fancy semantical footwork to avoid.⁶

As such, Boghossian opts for an epistemic notion of analyticity; one that is supposed to capture what it is to be *a priori* justified in believing a sentence is true. If we are not able to preserve one connection to the analyticity vertex of "The Golden Triangle", perhaps the other still holds. Boghossian [9, p.581] describes epistemic analyticity in the following way.

... If mere grasp of S's meaning by T sufficed for T's being justified in holding S true. If S were analytic in this sense, then, clearly, its apriority would be explainable without appeal to a special faculty of intuition: mere grasp of its meaning by T would suffice for explaining T's justification for holding S true. On this understanding, then, 'analyticity' is an overtly epistemological notion: a statement is 'true by virtue of its meaning' provided that grasp of its meaning alone suffices for justified belief in its truth.

Epistemic analyticity appears to fit well with the battery of cases many find to be intuitively analytic. For instance, a competent speaker of English is likely in a position to justifiably believe each of the following sentences.

(18) All bachelors are unmarried males.

⁶Gillian Russell's [117][118] work is dedicated to more fully developing and defending the notion of metaphysical analyticity. Although we are sympathetic to this project, commitment to it here is not required for our purposes.

- (19) a = a
- (20) If X bought a house, then X bought a building.⁷
- (21) I am here now.
- (22) Whatever is red all over is not blue.⁸

The case of the contingent analytic in (21) is interesting. Although it may not be *transparent* to a speaker what the precise content of that sentence is on a given occasion—e.g., if they were beat over the head and stuffed in the trunk of a car before awaking hours later and then consider the truth of (21)—they are always in a position to justifiably believe that it expresses a true proposition, whichever proposition that may be. Accepting the contingent analytic as such forces us to acknowledge a secondary notion of meaning, in addition to content, known as *character* as introduced by Kaplan [76, pp.505-507].

Character is that which determines the content of an expression across contexts. Given that the content of 'I', 'here', and 'now' each refer to different individuals, locations, and times with variation in context, they each have distinct characters which determine their referent picked out in context. Kaplan treats character as determined by linguistic convention and states it may be usefully represented as a function from context to content. Regarding epsitemic analyticity, we should think of the relevant meaning that a speaker must grasp in order to be justified in believing that a sentence expresses a true proposition, not as the proposition expressed, but as the character which determines which proposition is expressed in possible contexts. Moreover, we accept Kaplan's claim that, "[b]ecause character is what is set by linguistic convention, it is natural to think of it as *meaning* in the sense of what is know by a competent speaker of a language".⁹ This admission has the plausible result that character is known owing to competency with a language, and that such knowledge of character would transfer justification to those beliefs concerning which sentences must

⁷From Thomasson [135, p.28].

⁸From Boghossian [8, p.368].

⁹Kaplan [76, p. 505]

express true propositions as determined by their characters. Thus, epistemic analyticity may accommodate the contingent analytic by treating the relevant notion of meaning to be character. It is not required that the content of a sentence is transparent to a subject so that they may judge that it is true, but that the character of a sentence is in some way known such that they may judge it determines a content which must be true when the context and the circumstance of evaluation overlap.

Presumably, appeal to some notion of meaning other than propositional content is independently motivated in order to have an account of the *a priori* that is explained by analyticity. If knowing that the content expressed by a sentence is true were the grounds for a subject to judge that a sentence is analytic, then there would be no work for a notion of epistemic analyticity to perform. That is, on an ordinary analysis of knowledge, it is simply analytic that if a subject knows that a sentence expresses a true proposition, then they are justified in believing that the sentence expresses a true proposition. And thus, if knowing that sentence S expresses a true proposition were the grounds for epistemic analyticity—i.e., for the subject to justifiably believe that S expresses a true proposition—then its obtaining would not position a subject to attain a priori knowledge outside of the scope of the true propositions they already know. For if a thinker were justified in believing that some sentence S is analytic, that would turn out to be grounded in the fact that they know that Sexpresses a true proposition. But this gets the grounding relation for a priori knowledge in the wrong direction. One knows a priori that S expresses a true propositional content is grounded in the fact one is justified in believing that S expresses a true content and the fact that S expresses a true content.

Moreover, sentential contents (and plausibly thought content itself) are oftentimes opaque to subjects; this holds especially if the various kinds of content externalism are correct. And so it should not generally be expected that a subject will always be in a position to know the proposition expressed by a sentence in virtue of their linguistic competence. Once contextual factors are admitted as being relevant parameters for the determination of content, it must be admitted that when a subject is ignorant of the features of the context that are taken as parameters, they will (by and large) be ignorant of the propositional contents they are related to in thought or speech that are determined by those parameters; ignorance of the content of 'I am here now', whilst stuffed in a trunk, is arguably a prototypical case among many.

For our purposes then, we shall assume a notion of epistemic analyticity where the relevant notion of meaning is Kaplanian character (or something much like it). Of course, there are many more questions to be answered concerning potential objections to epistemic analyticity and how character is to be precisified.¹⁰ But further questions must be set aside; the understanding of these notions will be left at the intuitive level so to continue forward.

3.1.2 Analytic Entailment

We now turn to discussing Thomasson's [135] characterization of analytic entailment and how it may appropriately be understood epistemically as the sort of entailment that a subject is justified in believing holds in virtue of their logical reasoning and grasp of the relevant sentential characters.

Thomasson's appeal to analytic entailment is applied for the purpose of responding to causal redundancy arguments in the literature on ordinary objects; that is, arguments to the effect that accepting the existence of ordinary objects entails the existence of material objects without causal powers. Given Thomasson's motivations, they go on to develop a specific notion of conceptual content that is suited to ground the analytic entailments they need to do their argumentative work. Thomasson appeals to a few cases that illustrate the intended outcome. For instance, they desire that (20) comes out analytic, and although

¹⁰As Braun [11] notices, Kaplan's informal characterization of character and his formal characterization of character depart. For instance, his informal remarks have the result that 'Cicero = Cicero' and 'Cicero = Tully' have the same character since 'Cicero' and 'Tully' refer to the same individual in every context and thereby have the same content in every context; yet Kaplan's formal system entails these two sentences have distinct characterization is superior and that a structured account of characters is needed to capture it. Additionally, Braun [10] argues in favor of structured characters to account for semantic features of complex demonstratives.

we agree that it is intuitively so, it is certainly not uncontroversial. Here are some other plausible cases Thomasson seeks to establish but appear even more controversial.

- (23) If Fido is a dog, then Fido is an animal.¹¹
- (24) If atoms arranged baseballwise caused the shattering of the window, then a baseball caused the shattering of the window.¹²

To establish these as analyic entailments Thomasson claims we must accept "the thesis that our singular and general nominative terms have a basic conceptual content in the form of frame-level conditions of application and coapplication collectively established by competent speakers."¹³ Here we must pause. To further unpack Thomasson's view of analyticity would require a detour into their developed considerations on reference grounding and conceptual content, but that would take us too far afield. So we will set aside Thomasson's particular theses regarding the grounds of analytic entailments. Whether our position overlaps with Thomasson's in this regard is a question of the extent to which Kaplanian character may be related to the notions Thomasson deploys in specifying their grounds for analytic entailments, but this is neither here nor there since we do not seek to vindicate the same class of purported analytic entailments that Thomasson has in mind.

For our purposes, it is not necessary to dig further, since we need not develop or commit to a position that renders (23)–(24) as analytic entailments. Our project only requires modification of Thomasson's more general characterization of analytic entailment. So we must get it on the table, cash out a version of it that is epistemic, and later develop a fragment of an account of analyticity that is suited for the sorts of analytic entailments we wish to be captured by the heuristic for singular content. Here is Thomasson's general characterization of analytic entailment.

I use the expression 'analytically entail' to mean 'entail in virtue of the meanings of the expressions involved and rules of inference', so that a sentence (or set of

 $^{^{11}}$ Thomasson [135, p.41].

¹²Thomasson [135, p.17].

 $^{^{13}}$ Thomasson [135, p.180]

sentences) Φ analytically entails a sentence Ψ just in case, given only logical principles and the meanings of the terms involved, the truth of Φ guarantees the truth of Ψ . Thus where Φ analytically entails Ψ , given knowledge of the truth of Φ , as well as grasp of the meanings of the terms and reasoning abilities, a competent speaker may legitimately infer the truth of Ψ on that basis alone.

[135, pp.28-29]

A few points are in order. The first point is that this account of analytic entailment has both metaphysical and epistemic import. The metaphysical component specifies that logical principles and meanings of expressions ground the fact that the truth of ϕ guarantees the truth of ψ .¹⁴ The epistemic component specifies that, owing to the metaphysical fact, a subject's grasp of meanings and reasoning abilities justifies their inference to ψ on the basis of ϕ alone. The second point is that the espistemic component may be given a weaker reading if we are concerned with analytic entailment *per se* and not knowledge of that which is entailed.

Regarding the first point, although we have avoided commitment to a metaphysical notion of analyticity of the form that a sentence having a certain meaning alone suffices for the truth of the sentence, this does not bar us from adopting the commitment that there must be *some* relations among sentential meanings in virtue of which analytic entailments hold and ground a subject's justification in believing that the sentence expresses a true proposition. In fact, we will need to appeal to some notion of *containment* or *partial content* in order to deploy our analyticity heuristic for singular content in a non-trivial manner. More on this later. The relevant point here is that we can accept the metaphysical claim that "... the truth of Φ guarantees the truth of Ψ " (under the conditions specified) in Thomasson's statement of analytic entailment without running afoul of avoiding metaphysical analyticity—just as long as the truth of ϕ itself is not guaranteed by the meaning that ϕ expresses, alone.

Regarding the second point, we may restate Thomasson's characterization of analytic entailment in a way that is more perspicuously epistemic. The epistemic notion of analyticity

 $^{^{14}\}mathrm{We}$ a vert to lowercase Greek script as our preferred notation; quotes contain the author's original notation.

we have adopted is that a sentence S is analytic just in case a competent speaker of the language is in a position to form a justified belief that S must express a true proposition in virtue of their grasp of the character of S alone. Thus, a conditional sentence, "if ϕ , then ψ " expresses an epistemically analytic sentence just in case a subject is justified in believing "if ϕ , then ψ " expresses a true proposition in virtue of grasping it's character alone. This is captured by our epistemic account of analytic entailment. The statement of epistemic analytic entailment (*EAE*) is the following.

A sentence (or set of sentences) ϕ analytically entails ψ just in case

EAE a competent speaker of the language is justified in inferring ψ is true on the basis of the belief that ϕ is true, their reasoning capacities, and grasping the character of ϕ and ψ alone.

This specification is perspicuously epistemic in that analytic entailments turn out to be just those class of entailments between sentences which *justify* a subject in making the inference that if one sentence expresses a true proposition, then the other must as well. The epistemic conditions are weaker than Thomasson's in the sense that the subject does not need to *know* ϕ is true. Merely taking ϕ to be true is sufficient for making a justified inference to ψ . This is because the justification that attaches to the inference is generated *not by knowing* ϕ is true but by the relations of meaning and logic that obtain between ϕ and ψ . The metaphylical component in Thomasson's characterization of analytic entailment has fallen out in the specification of *EAE*; yet it is still operative since an agent is justified in inferring ψ from ϕ in such cases in virtue of the logical relations and relations of meaning obtaining between ϕ and ψ alone.

Epistemic analytic entailment so characterized has the result that, if ϕ analytically entails ψ , then a subject is justified in inferring ψ is true if they believe ϕ is true, solely on the basis of the logical relations and character of those sentences; that is just to say they are justified in believing that ψ follows from ϕ in the appropriate way (the *analytic* way). And thereby,

"If ϕ , then ψ " would itself count as epistemically analytic.

3.2 The Heuristic for Singular Content

We are now positioned to discuss the heuristic for whether a sentence expresses a singular content in more detail. In general, much is left at the intuitive level. We primarily seek to demonstrate proof of concept. How far the heuristic extends is largely a function of an individual's commitments concerning analyticity and singular content, but we expect there to be a large class of cases that the heuristic tells in favor of that will be useful to any thinkers friendly to the notions of analyticity and singular content, independent of their specific commitments.

3.2.1 Initial Specification and Substantiation

We gestured at the heuristic in the introduction; here is an initial statement of the *Heuristic* for Singular Content (HSC):¹⁵

For any sentence ϕ and any sentence ψ , if ϕ analytically entails

HSC ψ and ψ expresses a content that is singular with respect to some object o, then ϕ expresses a content singular with respect to o.

To reiterate the example we began with, (16) analytically entails (15).

(15) Abraham Lincoln was assassinated.

(16) The assassin of Abraham Lincoln was an actor.

If this is accepted, then, in accordance with our stipulation concerning conditionals, the conditional sentence (17) is analytic.

¹⁵This specification of HSC discusses singular content as contents that have objects as constituents. If we reify content slots as we did in Ch. 2, then we may treat those as the relevant objects. If a view of singular content is preferred in which *objects* must be constituents, whatever one counts as an object, or even object-dependent senses, then it may be read as that instead.

(17) If the assassin of Abraham Lincoln was an actor, then Abraham Lincoln was assassinated.

Another exemplar case that illustrates the heuristic is the analytic entailment represented by this conditional.

(25) If the house that Jack built was demolished, then Jack built a house.

Each of these cases are adapted from examples given by Strawson concerning how we may go about leveraging our ability to identify some object by reference to another that we are independently able to identify non-descriptively. Strawson's remarks on the matter help to throw light on why these entailments are intuitively analytic.

It often happens that the identification of a particular of one kind is made to depend on the identification of another particular of another kind. Thus a speaker may, in referring to a certain particular, speak of it as the thing of a certain general kind which uniquely stands in a certain specified relation to another particular. He may, for example, refer to a house as 'the house that Jack built' or to a man as 'the assassin of Abraham Lincoln.' In such cases, the hearer's identification of the first particular depends on his identification of the second. He knows what particular is referred to by the identifying phrase as a whole because he knows what particular is referred to by a part of it.

[132, pp.4]

If a subject is poised to pick out some object o using a description that relates o to another object o^* , in part by inclusion of an expression e contained in the description which refers to o^* , then, the subject is in a position to entertain singular contents containing o^* , since they must leverage their knowledge of e's referent to pick out o. And so, a subject that understands (16) is poised to justifiably infer that (15) holds on the basis of the meaning of (16) and their reasoning capabilities; i.e, they are poised to recognize that an analytic entailment holds between (16) and (15).

So far this just shows that understanding a sentence ϕ that analytically entails a sentence ψ , that expresses a content singular with respect to some object o^* , requires that a subject

is poised to entertain singular contents that have o^* as a constituent. It does not show that the content expressed by ϕ is singular or that it so by having o^* as constituent. However, *prima facie* the most likely reason that understanding a sentence ϕ requires being able to entertain singular contents with o^* as a constituent is just that o^* is a constituent of the content expressed by ϕ . It is rather difficult to see what an alternative explanation would look like that would *force* a subject to be in a position to entertain contents containing o^* in order to understand a sentence that expresses a content that does not contain it.

Perhaps here is another way to press the point. If we understand analytic entailment under the epistemic rendering that we have specified in EAE, then it is required that a competent speaker of the language be able to justifiably infer ψ is true from belief that ϕ is true solely by grasping the meanings of ψ and ϕ and deploying their reasoning capacities. So if we were to take a subject S and strip away all of their knowledge, save the knowledge of the meanings of the ϕ and ψ , then S must still be in a position to form the belief that ψ must be the case by inference from their belief that ϕ is the case. What explains that they would make such an inference is their grasp of the characters of ϕ and ψ and general reasoning capabilities. But what plausibly explains the fact that the inference is justified is partly that the content expressed by ψ has no further constituents than those expressed by ϕ . But if that is so, then σ^* must be a constituent of the proposition expressed by ϕ .

The purpose of rendering analytic entailment as EAE was to make the epistemic import of the notion perspicuous. But as we stated, this is consistent with the metaphysical component that Thomasson specified. Here we must lean more on the precarity of the metaphysical component. What grounds the justification, as we see it, will be facts about relations among propositional constituents. But this is not what the subject is required grasp in order to recognize an analytic entailment and make the relevant inference; for that to be the case all they need access to are those meaningful components that determine what the propositional constituents happen to be.

By way of illustration, consider a case of two blue blobs, Blab and Bleb. By supposition

the following claims are true.

- (26) "Blab is blue" analytically entails "Blab is colored".
- (27) "Bleb is blue" analytically entails "Bleb is colored".

What makes them analytic entailments is that any competent speaker that understands "Blab is blue" is poised to infer "Blab is colored" in the analytic way. Likewise, for Bleb being blue and being colored. What explains that a competent speaker would make such inferences is some underlying principle constitutive of the characters of "blue" and "colored" that may be rendered: $\forall x(x \text{ is blue} \rightarrow x \text{ is colored})$. But what explains that the inferences are justified is not this principle, but the contents that the principle operates over. Thus, what explains that inference from "Blab is blue" to "Blab is colored" is justified is distinct from what explains that the inference from "Bleb is blue" to "Bleb is colored" is justified. In both cases, the inferences are partially justified by some relation that holds between the property *being blue* that is a constituent of the content expressed by "Blab is blue" and "Bleb is blue", and the property *being colored* that is a constituent of the content expressed by "Blab is colored" and "Bleb is colored". Perhaps the relation is that the property being blue contains being colored, whatever this amounts to. But additionally, the justification for (26) is distinguished from (27) in that it requires the occurrence and recurrence of Blab as a propositional constituent in the contents expressed by both mentioned sentences—the subject, or that to which the properties are attributed, must be preserved and the justification for (27) requires the occurrence and recurrence of Bleb as a propositional constituent in the contents expressed by both mentioned sentences.

So, as the story goes, what makes for analytic entailment is that a subject is justified in inferring from ϕ to ψ in the analytic way. But "inferring in the analytic way" is inferring on the basis of logic and grasp of characters. What fixes that these inferences are justified is the fact that the contents that they operate over stand in appropriate relations to one another. And one relation that obtains between content expressed by ϕ and the content expressed ψ such that a justified inference may be made from one to the other by a competent speaker of the language is that the content of ψ is contained in the content of ϕ ; which given the case at hand, requires ϕ contain o^* as a constituent.

3.2.2 Problem Cases and Further Development

This brings us to a few problem cases that may serve as counterexamples to *HSC*. Consideration of these cases will require that we specify with more precision how the constituents of the propositions expressed by sentences that analytic entailments obtain between must be related to one another in order for a subject to justifiably infer from one sentence to the other.

Consider the following conditional claims.

- (28) If grass is green, then either grass is green or Blab is blue.
- (29) If $\forall x(Fx)$, then Blab is F.

The conditional in (28) is certainly true as a matter of logic alone. And the conditional in (29) is a logical truth under the condition that Blab has been specified as a member of the domain being modeled. In both cases the antecedent expresses a content that is uncontroversially general and the consequent expresses a content that is uncontroversially singular with respect to Blab. Thus, if the entailment between antecedent and consequent is taken to be an analytic entailment, then both (28) and (29) serve as counterexamples to *HSC*. Given the statement of analytic entailment provided in *EAE*, both (28) and (29) are not excluded from being analytic entailments. Neither are they excluded from the statement of analytic entailment that was offered by Thomasson. Thus, as it stands, the heuristic requires modification otherwise we will be able to arrive at the conclusion that all sentences expresses singular contents *trivially* by using this schema based upon (28): $\phi \rightarrow (\phi \lor \psi)$. Where ϕ is any sentence and ψ is some sentence that expresses a singular content. One may respond to (29) as a potential counterexample by pointing to the fact that in order for a subject to understand and recognize it as expressing a truth, they must presuppose that Blab is a member of the domain. And so an additional claim is being smuggled, namely, that Blab exists. If so, perhaps (29), if intended to be an analyticity, ought to actually be rendered as (30).

(30) If $\forall x(Fx)$ and Blab exists, then Blab is F.

If (29) ought to actually be rendered as (30), then it does not serve as a counterexample to HSC for the antecedent of (30) expresses a content singular with respect to Blab. The response is plausible, but there is no corresponding move to be made for (28). Different considerations must apply to block (28) as a counterexample, but as well shall see, the move to block (28) may also apply equally to (29) depending on how we are to interpret quantifiers when considering analytic entailments.

The preceding discussion about what justifies those inferences which a competent speaker is poised to make on the basis of their grasp of sentential meanings and reasoning capacities illuminates how to go about making the relevant restrictions on analytic entailment so that the heuristric does not result in triviality. Given that both (28) and (29) are both included among the analytic owing to the fact that they express purely logical truths, the only way to respond is to limit the class of analytic entailments in such a way that they do not include all logical entailments. And to do so, we need a working notion of *containment*.

The reason that (28) and (29) serve as counterexamples to HSC is because the contents expressed by the consequents in each case outstrip the contents expressed by the antecedents. Intuitively, what motivates HSC as a heuristic for singular content is that the contents expressed by the sentence that is entailed *contain nothing more* than the constitutive elements in the content expressed by the sentence that entails it. That is to say, if it is the case that $\phi \rightarrow_a \psi$, then the constituents of the content expressed by ψ are a subset of the constituents of the content expressed by ϕ .¹⁶

¹⁶The use of \rightarrow_a is to stand for analytic entailment.

An account of analytic entailment, by appeal to *containment* or *partial content*, that meets these demands has been developed in the works of of Angell [3], Fine [37], and French [44]. As stated by Fine [37, p.199],

The intended interpretation of a statement $A \to B$ of analytic entailment is that the content of B should be part of the content of A, and a guiding principle behind the understanding of partial content is that the content of A and of Bshould each be part of the content $A \wedge B$, but that the content of $A \vee B$ should not in general be part of the content of either A or B. Thus partial content cannot be understood as classical consequence or even as relevant consequence under its more usual interpretation.

And a corresponding notion of *preservation of subject matter* has been characterized by Yablo [136, p.3] to define containment:

A contains B, I propose, if the argument A, therefore B, is both truth-preserving and subject-matter preserving. Snow is hot and black \therefore Snow is hot and black, or boiled tar is hot and black, though not truth-conditionally ampliative, does break new ground on the aboutness front.

We need not get into the niceties of Yablo's detailed account of preservation of subject matter, or Fine's semantics for analytic entailment to acknowledge that the notion of *containment*, *partial content*, or *preservation of subject matter* intuitively rule out (28) as an analytic entailment—since the content expressed by "Grass is green or Blab is blue" is not part of the content expressed by "Grass is green". And so, responding to (28), and ruling out similar cases developed by appeal to the associated schema $\phi \rightarrow_a (\phi \lor \psi)$, requires adopting some such notion as containment or its ilk that are backed by their *prima facie* plausibility and development in philosophical literature.

If the initial response to ruling out (29) is not convincing, then one may instead appeal to partial content as they would to block (28); the result would need to be that the content of the consequent is not a part of the content of the antecedent. Arriving at this result, however, depends on how we are to understand the interpretation of universally quantified sentences in the logic of analytic containment. As Fine [37, 225] notes, if we wanted to extend the logic of analytic containment (AC) to the quantifiers, then the obvious way would be to interpret a universal quantified sentence as the conjunction of all of its instance. If that were the case, then that Blab is F would appear, under analysis, as a conjunct in the antecedent of (29), but then surely (29) would express an analytic entailment and would not run afoul of the heuristic, since the antecedent of (29) would now have a conjunct that is singular with respect to Blab; not only that but the antecedent of (29) would be singular with respect to every object of the domain. This approach would capture the intuition that the content expressed "Blab is F" is a part of the subject matter of $\forall x(Fx)$, since the content of $\forall x(Fx)$ contains as a part all of the individuals in the domain.

However, it does seem counterintuitve to us that universally quantified sentences would have the status of containing all of their instances as content and as a part of their proper subject matter. And Fine seems to agree, claiming [37, p.225],

...a more promising approach is is to admit *generic* verifiers, under which a sentence of the form $\forall x F(x)$ would be verified by an arbitrary object being F... Under such an approach, there would be no need for the content of $\forall x F(x)$ to contain the content of its various instances and other unwanted entailments could also be avoided.

We believe something along these lines is to be preferred. That is, whatever the interpretation of $\forall x F(x)$ turns out to be, it is not one that contains its instances as parts. And so, (29) would not count as analytic entailment and thereby would not serve as a counter example to *HSC*.

However, this does not ultimately save the heuristic from a modified version of (29). If we accept Fine's view that universally quantified sentences have generic verifies understood as arbitrary objects, then the counterexample persists through a slight change.

(29*) If $\forall x F(x)$, then a is F.

In (29^{*}) we understand 'a' as an expression that picks out an arbitrary object. This is illustrative in the that the deploying of HSL does not depend on a subject's *knowing* which objects a singular term refers to. As long as their is an associated character and the subjects have knowledge of it, they will be poised to deploy it in judgments concerning analyticity. That is to say, the heuristic is to judge whether a content is singular *simpliciter*, not whether it is singular with respect to some particular object. Being unable to judge that (29) is not analytic by appeal Fine's preferred interpretation of the universal quantifier does not prevent Fine from introducing sentences that refer to arbitrary objects as being entailed by $\forall x F(x)$. We submit, this would continue to serve as a counterexample. Here we must stipulate that the test is not to be applied in such cases. Partially because this is a difficult case, and we know why it is difficult case—the resulting entailment is an artifact of the fact that the simplest way of setting up a logic containing variables is to treats variables with an assignment function. Moreover, consideration of the intuitive subject matter of $\forall x F(x)$ does not seem to include each of its instances; rather, its subject matter is *everything*. The heuristic has intuitive appeal when it is applied to those cases in which we would judge that an individual is among the subject matter of a sentence.

Ultimately, the status of (29) depends on how the universal quantifier ought to be interpreted. If it is interpreted as a conjunction of its instances, then it will turn out that (29) count as an analytic entailment, but it does not run afoul of the heuristic. We side with Fine in thinking that (29) ought not to count as an analytic entailment, and as such it could not count against the heuristic. With respect to (29^{*}) we submit it remains a counterexample, but one in which *HSC* must be restricted from in application, for (29^{*}) presses the limits of the test owing to facts about our construction of logical systems containing variables.

Our final word on *HSC* is that it serves as a genuine heuristic for determining whether a sentence expresses a singular content because analytic entailments are just those entailments that justify a subject in making an inference in the analytic way. And this justification is grounded in the fact that some relation of containment holds between the content of the sentence that is inferred and the content of the sentence that it is inferred from—such that, the content of the sentence that is inferred that is inferred to that is inferred to the sentence to the sentence that is inferred to the sentence to the sentence to the sentence that is inferred to the sentence to the s

elements of the content of the sentence it is inferred from. If this is so, then the only way a subject would be in a position to justifiably infer that $\phi \rightarrow_a \psi$ in an instance where ψ expresses a singular content, would be if ϕ also expressed a singular content.

3.3 Constraints and Applications

Last we are to consider applications of HSC and explore those cases in which it tells in favor of some sentence expressing a singular content, and those cases in which it *may* tell in favor of but with which intuitions are reasonably expected to be divided.

3.3.1 Clear Cases of Application

The cases with which we have began are clear cases in which the heuristic tells in favor of the antecedent expressing a singular content.

For example sentence (17).

(17) If the assassin of Abraham Lincoln was an actor, then Abraham Lincoln was assassinated.

Given that the consequent expresses a content singular with respect to Lincoln, the antecedent must also express a content singular with respect to Lincoln. Likewise for (25).

(25) If the house that Jack built was demolished, then Jack built a house.

Since the consequence expresses a content singular with respect to Jack, so must the antecedent express a content singular with respect to Jack. In fact, any case where we begin with a sentence that has a referential expression as constituent, independently of the position that expression occupies in the sentence, the heuristic intuitively rules in favor of that sentence expressing a singular content. The heuristic may be used to determine that sentences similar to the sentential clauses contained in the antecedent of (17) and (25), that have often been taken to express purely general contents, also express singular contents. Here are a few cases.

(31) The 44th president of the United States is tall.

- (32) The great Spanish painter of Les Meninas is dead.
- (33) The tallest mountain in Europe is 4,000 metres high.¹⁷

From (31) one is able to infer (in the analytic way) that the United States had a tall president; insofar as "the United States" is a referential expression, that the United States had a tall president is singular with respect to the United States, and thereby (31) is also singular with respect to the United States. *Mutatis mutandis*, we may arrive at (32) expressing a content singular with respect to Les Meninas, for one may infer from it that Les Meninas had a great painter; (33) expresses a content singular with respect to Europe, for one may infer Europe has a mountain 4,000 meters tall.

Additionally, the heursitic tells in favor of contents being *multiply singular*, i.e., singular with respect to more than one object. For instance from the truth of,

(34) The 43rd president of the United States respects George H.W. Bush.¹⁸

a competent speaker of the language is in a position to infer that the following sentences express true propositions,

(35) George H.W. Bush is respected by someone.

(36) The United States had a 43rd president.

 $^{^{17}(31)}$ and (32) are adapted from examples in Jeshion [65, p.5]; (33) is adapted from an example in Recanati [110, p.148].

 $^{^{18}}$ This example is taken from Glick [46, p.1029].

Given that (35) expresses a content singular with respect to George H.W. Bush and (36) expresses a content singular with respect to the United States, *HSC* has as a result that sentences may be singular with respect to multiple objects. This feature of singular content is not often discussed, but has not gone unnoticed.¹⁹ The interesting result is that the *HSC* may also be used to determine which sentences expresses contents that are multiply singular.

Of course, one may have been in a position to judge that the content of the clauses in the antecedents of (31)–(33) were already intuitively singular, given that those clauses contain as constituents referential expressions; additionally, one may have also intuitively judged that (34) expresses a content that is multiply singular given the occurrence of multiple referential expressions. However, we do take it to be an advantage of the heuristic that ruling in favor of the foregoing examples as expressing singular (or multiply singular) contents effectively rules out alternative semantic theories that would otherwise exclude the examples from expressing such contents. Insofar as one thinks their judgements concerning analytic entailment in these cases are reliable guides to the contents of the sentences under consideration, the results of applying the HSC so far provide reason for endorsing semantic theories that closely tie together the occurrence of referential expressions in sentences and the constitutive elements of the contents those sentences express. This consequence seem to be the clearest in those cases of definite descriptions containing referential expressions; thus, the results of applying the HSC suggest that, under analysis, those definite descriptions containing referential expressions as constituents contribute the referents of those expressions to the propositional content expressed by the sentences in which they are embedded.

3.3.2 Not-So-Clear Cases of Application

The clear cases where application of HSC determines that a sentence expresses a singular content that are ordinarily disputed are those containing overt referential devices as syntactic constituents of definite descriptions. This suggests there may be a rather tight connection

¹⁹See e.g., Glick [46].

between the presence of referential expressions in a sentence and the nature of the constitutive elements of the proposition expressed by the sentence. In cases where referential devices appear overtly as the subject or predicate of a sentence, that those sentences express singular contents is hardly controversial for any friend of singular content. So, if accepting these results extends the class of sentences that one would accept as expressing singular contents, it does so rather modestly.

Nevertheless, that the expression of singular content is tied more closely to the presence of referential devices in the *overt* cases suggests that the expression of singular content may also occur in uses of sentences where a referential device *does not occur overtly*, yet in which reference still intuitively plays a role in determining the content of the sentence. We must flag that we are now thinking of the objects of analyticty as *uses of sentences on an occasion*, i.e., as *utterances*. Strictly speaking, the Kaplanian notion of characters applies to sentences and not utterances. But there seems to be a natural way of extending character to utterances by way of considering the character of the sentence that is used as determining the content expressed in the context it is uttered. In fact, Speaks, Jeff [131, p6.] treats character as a function that takes contexts of utterances as input and delivers contents as outputs in their notes on two-dimensionalism.²⁰

Here we shall understand the occurrence of reference when using a sentence without an overtly occurring referential device as *implicit reference*; the likes of which is discussed extensively in Neale [94]. What implicit reference precisely amounts to is rather controversial; we shall lean on Neal's [94, p.207] characterization that they align with the position held by Schiffer [122]:

... in uttering something, x, a speaker, S, refers to something, o, implicitly if (1) S refers to o in uttering x, and (2) there is no part of x with which S referred to

o (ignoring for now the question of what sort of thing x is).

For instance, a sentence that is often wheeled out to illustrate the occurrence of implicit

 $^{^{20}\}mathrm{It}$ is worth noting Speaks [131] are notes Speaks has made freely available online for the purposes of instruction.

reference is (37).

(37) It is raining.

Naturally, the information conveyed by this sentence in context is often determined by the location it is used. When the sentence is used in Davis, California, the information that it likely conveys is that it is raining in Davis. And so, it is claimed use of (37) in that context implicitly refers to Davis given that there is no part of (37), i.e., no overt syntactical element, that refers to Davis.

As a matter of course, to fit this characterization of implicit reference into our considerations of analytic entailment and application of HSC we must adopt the that view that xas discussed in the above characterization is a sentence; in addition the parts of x will be understood as those syntactical elements in its overt grammatical structure. What the precise mechanics of implicit reference are, we take no stand on. One may endorse a *syntactic view* in which the sentence contains some referential syntactical element that is represented in some manner, but which is not a part of the overt grammatical structure. Or one may endorse a *semantic view* in which semantic interpretation requires the introduction of an object as a constitutive element to the proposition expressed.²¹ All that matters for our purposes is that there is some intuitive notion of implicit reference in which an object *some how* makes its way into the content of a proposition even though the sentence used to express the proposition included no syntactical element in its overt grammatical structure that can be identified as referring to the object.

Now, we may question how uses of sentences involving implicit reference interacts with *HSC*. The intuitive pull of *HSC* is supposed to be that we are in a position to judge when certain sentences ψ follow from other sentences ϕ analytically, and that, given our knowledge of the contents of ψ , such judgements inform us about the constitutive elements of the contents of the of ϕ . So, if an instance of a sentence ϕ' with no overtly referring expressions is used and, in virtue of understanding the meaning of the sentence, a subject is positioned to

²¹These positions are described in Recanati [109].

infer a sentence ψ' that expresses a singular proposition, then HSC ought to be understood as determining two things: (1) that the content expressed by ϕ' is singular with respect to the same object as the content of ψ' and (2) that the use of ϕ' is an instance of implicit reference.

Suppose, for instance that (37) is uttered in Davis, California. A subject that understands the utterance *and* knows that they are in Davis, then ought to be able to infer,

(38) It is raining in Davis.

This seems rather commonplace for understanding uses of (37) in a context. However, as specified, this inference relies not only on the subject's understanding of the expressions in (37) but their knowledge that they are in Davis. Consider the subject that is incapacitated and stuffed into a trunk and awakes some time later and says out loud,

(21) I am here now.

Of course, there is a sense in which they understanding the meaning of (21) such that they know that what they said expresses an epistemic analyticity; i.e., they are justified in believing that the sentences expresses a true proposition. Yet, they are of course ignorant as to their location and the time; and so even if they just so happened to be in El Paso, Texas at 9:30am, they would not be in a position to infer this—they are ignorant of the referent of the "here" and "now" and thereby ignorant of the proposition they express.

Likewise, the subject that understands the meaning of (37) and is ignorant of the fact that they are in Davis, would not be in a position to infer (38). Thus the truth of (37) does not analytically entail (38), in the epistemic sense we have specified. And so even if the content of (37) in context contains the content of (38)—in fact, their content ought to be identical—the subject is in no position to make a justified inference from one to the other on the basis of understanding the meanings of (37) and (38). But there is a sentence in the vicinity that they are position to infer which has this same content: (39) It is raining here.

If (37) is judged to analytically entail (39), on the condition that a subject is poised to recognize that they must have *identical content*, whatever that content may be, then this suggests the *HSC* serves the dual purpose as just outlined. One purpose is to draw out whether certain sentences express singular contents, and the other is to draw out whether certain uses of sentences contain implicit reference. Needless to say, whether *HSC* is apt to serve this second purpose depends on whether users of the heuristic find it compelling to think that (39) may be inferred from (37) in the analytic way.

That (37) analytically entails (39) may be objected to one the basis that, in conversations occurring across locations (37) may very well be used to communicate (40).

(40) It is raining there.

And so once we fix a *conversational* context the relevant entailment may not be from (37) to (39), but from (37) to (40). So, the question is whether understanding the meaning (in the sense relevant to judging an analytic entailment holds) of (37) requires knowledge of the conversational context in which it is uttered. And there is a plausible case to be made that it does.

For if what determines propositional content, and what must be known to make the relevant judgements concerning analytic entailments, is some notion of character in a Kaplanian vein, we can explain someone's failure to infer from (37) to (40), or from (37) to (39), as cases in which they're ignorant of certain contextually supplied parameters. For they will be ignorant of features of the context that determine that (37) is sometimes used to implicitly refer to Davis and sometimes to El Paso, or any other number of locations of which one can think. Further, we can imagine that (37) is used and that *even if the agent were to know the location they and their interlocutor occupied*, they would still be unable to determine the proposition expressed. This suggests that if a subject is not poised to infer from (37) to (39), or from (37) to (40), it is not simply because they are ignorant of their location, but perhaps also ignorant of the intentions behind the utterance of (37).

To be clear, we are not claiming that (37) is elliptical for (39) or (40). Nor that there is some hidden syntax (37). Perhaps the latter holds. We remain neutral on what further syntactic or semantics facts may ground the implicit reference. In fact, we need not (and ought not) rely on the expressions "here" or "there" as occurring in the relevantly entailed sentence. It is more appropriate to say of (37) that it's character determines a location slot to be filled in a proposition. So the best rendering may be is (37) instead entails a sentence such as (41).

(41) It is raining at L.

Where L is some referring expressions that picks out distinct locations in different contexts. What is important to the sentences that may be inferred from (37) is that a subject is poised to know, on the basis of grasping the meaning of (37), that a location is being referred to that makes its way into the propositional content expressed by the use of (37) on an occasion. One might even claim that the meaning of "It's raining" is partially constituted by there being a location at which it is raining, since the occurrence of rain does not happen absent a location.

There are three claims we wish to rely upon here. That (i) there are instances of implicit reference that are to be explained by certain meaning properties of sentences. That (ii) intuitively, there is an analytic entailment from (37) to (41). And that (iii) this entailment reveals cases in which implicit reference occurs owing to the fact that subjects are poised to judge the entailment holds on the basis of those meaning properties that determine occurrences of implicit reference. Under the conditions that (i)-(iii) hold, HSC may be usefully deployed to determine when a sentence expresses a singular content, and when implicit reference occurs. Moreover, if HSC plays both roles, the class of sentences that express singular contents may be be extended beyond the modest extension we initially observed. Let's consider how this may be accomplished.

The most straightforward cases where HSC will intuitively determine a sentence expresses a singular content are those cases of implicit reference that are ordinarily appealed to, such as (37); as such, they turn out to be instances of implicit reference and thereby express singular content. Consider (42).

(42) Every farmer complained about his taxes.²²

In order to deliver the relevant truth-conditions expressed by (42), the quantifier must be restricted in some way. One way this could occur is by postulated implicit reference to the location of the farmers. But to check whether that is a plausible way that the quantifier becomes restricted, we consider whether there is intuitively an analytic entailment from (42)to (43).

(43) Every farmer at L complained about his taxes.

Again, where L is a referential device that picks out a location in context. We find that intuitively (42) analytically entails (43). And this tells in favor of implicit reference occurring and being the grounds for restricting the quantifier. As well, the content expressed by (42) must be singular.

The original cases that we began with that HSC seemed to tell in favor of generating commitments to sentences expressing singular contents were those with definite descriptions overtly containing referential expressions as syntactic constituents. Finding the application of HSC compelling in the inference from (42) to (43) compelling suggests that quantifiers are intuitively restricted by the occurrence of implicit reference. These facts taken together tell in favor of the view HSC being applied to definite descriptions that do not contain referential expressions as overt syntactic constituents may also compel us to accept that their use involves implicit reference and thereby express singular contents. Consider the inference from (44) to (45).

²²This particular case is taken from Sennet [126].

(44) The mayor is corrupt.

(45) The mayor of C is corrupt.

Where C takes some city or town as value in context. We find this to be an intuitive analytic entailment. One need not know which city or town is being referred to in order infer from (44) that some city or other must be the relevant location picked out since it is the role of a mayor to be the head of a city; it is partially (or wholly) constitutive of the meaning of "mayor" that it applies to an individual that is the head of city.

Thus, by applying HSC we judge that (44) is a likely candidate for expressing a singular content, and by generalization, other sentences containing definite descriptions that require restricted quantifiers to deliver the relevant truth-conditions. Which class of sentences, we cannot say precisely. However, admitting that there is some larger class of sentences which HSC tells in favor of containing implicit reference has the result that more sentences might express singular content than many would ordinarily expect.

Concluding Remarks

Our focus in this chapter was primarily to construct an intuitive heuristic for determining whether a sentence expresses a singular content—the *HSC*. The heuristic required appeals to the disputed notion of *analyticity* and the related notion of *analytic entailment*. We endorsed a version of *epistemic* analyticity understood as that which justified a subject in taking a sentence to express a true proposition in virtue of their knowledge of the sentences meanings (understood along the lines of Kaplanian character) and general logical and reasoning capacities. We then extended this to analytic entailment to develop a perspicuously epistemic characterization of analytic entailment.

Having provided a characterization of epistemic analyticity and analytic entailment, we then developed and substantiated the *HSC* in more detail by consideration of cases that may serve as counterexamples. This required appeal to the propositional contents of sentences and the notion of *containment* to specify how the *HSC* ought to be understood and to block the potential counterexamples. We then applied the heuristic to sentences that one may dispute as expressing singular contents, but in which the *HSC* seems to clearly tell in favor of as expressing singular content; the results compel us to recognize a moderate extension of the class of sentences one should take to express singular content.

Finally, to motivate a further extension of the class of sentences expressing singular content, we considered non-clear cases of application that are ordinarily taken to involve *implicit reference*. We determined that if the *HSC* tells in favor of these sentences expressing singular contents, it does so because it tells in favor of uses of those sentences containing implicit reference. The results of that discussion are that the *HSC* may be deployed for dual purposes: 1) determining whether a sentence expresses a singular content and 2) determining whether implicit references occurs in a sentence. On the whole, we find it appealing to think that the non-clear cases considered may be justifiably understood to involve implicit reference, and thereby we are compelled to recognize that the class of sentences expressing singular content is broader than many ordinarily accept.

Chapter 4

Conceptual Engineering and Singular Thought

Introductory Remarks

As discussed in Chap. 1, a survey of the extant literature concerning ST reveals numerous competing theories regarding the nature of the phenomenon. Some theorists take ST to be uniquely distinguished by having object-dependent propositional content; additionally, some introduce the requirement that the thinker bear some special epistemic relation to the object with respect to which a thought is singular, i.e., dependent upon.¹ Other theorists distinguish ST primarily in terms of the vehicles of representation that constitute the thought; e.g., so called 'mental files' are often understood to be representational vehicles which many allege are the singularity-making constituents of thought. And other theorists distinguish ST by appeal to its epistemic or inferential role.² Moreover, each of these conditions may be conjoined in various ways to develop more restricted accounts of ST than those that take

¹As discussed previously, such an account may come in either Russellian or Fregean varieties

²See Armstrong and Stanley [4] for a view according to which ST is individuated by appeal to object dependent content. See Recanati [110] for a view according to which ST requires both acquaintance and mental files. See Jeshion [66] for a view according to which ST is constituted by mental files and does not require acquaintance. And see Dickie [27] for an epistemic account.

the conditions individually.

Prima facie, the continued widespread disagreement regarding the nature of ST indicates that there is no unified account of individuative criteria to be found among philosophers' favored views.³ Indeed, one central claim to be motivated in this chapter is that there is no unified account of ST in the extant literature. But this claim shall not be argued for by surveying the different accounts of what is constitutive of ST and finding them in disagreement. Instead, we shall argue that the way in which we *ought* to be thinking of and developing a theory of ST—within the framework of *conceptual engineering*—reveals no unified theme in current philosophical theorizing on the matter. This chapter may be seen as a case study in conceptual engineering that treats development ST as its case. Conceptual engineering has been deployed largely for ethical theorizing about ordinary notions such as gender. It may also be appropriately applied to notions introduced in the sciences. Here we shall use it as applied to the technical philosophical notion of ST. We shall argue that, understood as a project of conceptual engineering, there are a variety of distinct concepts expressed by the use of the locution 'singular thought'. And that they may be embraced for different theoretical purposes.

With this goal in mind, we shall begin §4.1 of the chapter with some critical remarks on philosophical methodology as employed in theorizing about ST. In short, we hold that traditional conceptual analysis is not an exhaustive method for developing a complete account of ST. Instead, we shall motivate the view that our theorizing concerning ST is best understood as a project of *conceptual engineering*.⁴ In §4.2 of the chapter, we approach theorizing about ST, qua conceptually engineered notions, by considering the variety of theoretical roles for which concepts expressed using the term 'singular thought' have been put to purpose and identify various distinct concepts on that basis. Lastly, in §4.3, we briefly discuss why the

³See Hawthorne and Manley [57] and Sainsbury [120] for distinct markers of singularity and arguments that apply pressure to the significance of the category of ST.

⁴Conceptual engineering is discussed at great length in Cappelen [16]. We will lean on the discussion in Chalmers [18]. This project has also been discussed much earlier as *ameliorative analysis* in Haslanger [56], and perhaps introduced even earlier as *Carnapian explication*, see Brun [14].

considerations discussed in ^{§4.2} suggest that there is no unified account of ST to be given in terms of those purposes for which distinct notions have been engineered, and why this is not surprising.

4.1 Methodology for Arriving at a Theory of Singular Thought

One prominent way of proceeding in philosophical inquiry that has guided the theoretical development of ST in the contemporary is via traditional conceptual analysis; henceforth, merely conceptual analysis.⁵ We have in mind a particular philosophical methodology that has a storied tradition and is aptly illustrated by the *justified true belief* (JTB) analysis of knowledge and the extant literature on Gettier cases that issues challenges to the JTB analysis. Conceptual analysis so understood proceeds by consideration of thought experiments; otherwise known as the *method of cases*. Use of thought experiments involves specifying conceivable scenarios in precise terms and querying whether some concept applies in the conceived situation; e.g., we may query whether an agent succeeds in knowing that P in a scenario specified such that they have a justified true belief that P, but happen to have arrived at that belief in some lucky manner.

The development of theories of ST has proceeded in such a manner, i.e., by way of considering conceivable scenarios in which an agent may be truly attributed some thought or other and consulting our intuition to classify the thoughts proffered in such cases as either singular or general. Once proffered cases have been sorted, philosophers consider those that are judged intuitively singular; they then attempt either to identify which features are common among those instances of thought judged to be singular in order to arrive at some purported set of necessary and sufficient conditions for the application of the concept

⁵We specify *traditional conceptual analysis* in order to distinguish this methodology from other contemporary approaches that might be labelled 'conceptual analysis' but may need to be characterized somewhat more broadly.

SINGULAR THOUGHT or to illuminate the conceptual connections that SINGULAR THOUGHT bears to other philosophically important concepts, such as REFERENCE or ABOUTNESS.⁶ Jeshion[66] proceeds in this fashion when developing their cognitivist account of ST—as evidenced by the following passage.

Here, I shall be leaning very heavily upon a series of cases aimed at generating intuitions about whether a given individual has a singular thought. The dialectical strategy is to show that neither Acquaintance Theories nor Semantic Instrumentalism can accommodate our intuitions.

[66, p.109]

As indicated by the passage, the method of cases is used to allegedly demonstrate that acquaintance cannot be a condition that constrains the correct theory of ST and semantic instrumentalism cannot be permitted by a correct theory of ST. A passage from Moldovan[93] further emphasizes the reliance on conceptual analysis in the contemporary discussion.

The data [for singular thought] are sometimes presented in terms of "having in mind"... or "thinking of" a particular individual... These phrases are meant to trigger the intuition of singularity, or aboutness, or maybe directness, of thought. There is also agreement over the paradigmatic cases that exhibit these features. However, there is a great range of cases over which there is no agreement.

[**93**, p.90]

This passage further illustrates that theorizing about ST has proceeded by testing philosophers' intuitions concerning whether singularity is present in cases where an agent is attributed some thought. Theorists will then generate a set of application conditions for ST

⁶We adopt the convention of referring to concepts by appeal to capitalized letters in distinct font; i.e., KNOWLEDGE is the concept expressed by the use of the expression 'knowledge'. We shall treat concepts as the semantic values of predicative expressions that serve as the constituents of propositions. Given that we endorse a Russellian theory of propositional content—according to which propositions are structured sets of objects and properties—this has the result that the concept expressed by some predicative expression is a universal. For instance, the use of the predicative expression 'green' expresses the concept GREEN which is identical to the universal greenness, or otherwise, the property being green. Given our preferred view of the semantics of proper names, indexicals, and demonstratives, it also follows that such expressions do not express concepts if the object they are used to to refer to is not a universal.

that fit the data; i.e., by appeal to conceptual analysis. The cases in which there is no general agreement are those that are often left as choice points in developing a theory.⁷

The question we are concerned with is the extent to which conceptual analysis is the appropriate methodology for arriving at a comprehensive theoretical account of ST. Although we believe conceptual analysis to be a fundamentally indispensable and characteristic methodology of philosophical inquiry, we claim that it does not provide a complete methodological basis for constructing a theory of ST. Moreover, conceptual analysis may not even be the *primary* methodology with which we should approach theorizing about ST; i.e., where the primary method is the method that takes precedence over others.⁸ In the rest of this section we shall fill out our preferred picture of conceptual analysis and our understanding of the historical roots of ST in order to draw attention to the shortcomings of conceptual analysis as a comprehensive method for detailing a theory of ST. Thereafter, we motivate conceptual engineering, explicated below, as the comprehensive methodological approach for theory development in this domain.

4.1.1 Conceptual Analysis

Our favored view of conceptual analysis is one that directly links the notions of intuition, conceivability, and concept application.⁹ To have an intuition, on our preferred view, is to judge whether a concept applies in some conceived scenario. Another way of putting this point is to say that having an intuition is an expression of one's *conceptual competence* when considering conceivable scenarios; where conceptual competence is understood as one's ability to appropriately apply a concept in relevant cases, whether merely conceivable or actual. For

⁷In alignment with the conclusion that we are after here, Moldovan argues that, although the data for ST are often presented as data for a unified phenomena, there is no unitary account of ST to be given.

⁸Orthogonally, Andow [2] argues that we ought to understand the method of cases itself as conceptual engineering, i.e., philosophers consult their intuitions to obtain information that places constraints on, and guides our theorizing about, the relevant concept under consideration. In this way, conceptual analysis may be understood as a *kind* of conceptual engineering; in particular, one that treats the relevant normative constraint on our theorizing about some concept as that which, to use Plato's famous metaphor, *carves nature at its joints*.

⁹We have in mind a traditional picture of conceptual analysis that is akin to the picture discussed in Ludwig [88] and defended by Lammens [83].

instance, one might specify a case in which Ponce de León has been informed, through reliable sources, that there is a natural spring located in the New World which reverses the aging process when its water is consumed. As the lore goes, this spring is named the Fountain of Youth. Upon receiving this testimony, Ponce de León comes to believe that the Fountain of Youth is located in the New World. We may query, does Ponce de León know that the Fountain of Youth is located in the New World? Those of us competent with the concept KNOWLEDGE should readily have the intuition that Ponce de León fails to know in this case. For it is simply false that the Fountain of Youth exists and thereby it is false that the Fountain of Youth is located in the New World. We have the intuition that Ponce de León fails to know in this case in virtue of the fact that we judge, given our conceptual competence with KNOWLEDGE, that KNOWLEDGE fails to apply in the conceived scenario because what is purported to be known is not true. If the intuition is genuine—meaning, if we are competent users of the concept KNOWLEDGE and judge that the concept fails to apply in the conceived scenario as a result of our competency—then we have determined that a necessary condition for possessing knowledge is that the proposition purported to be known is true. Conceptual analysis, so understood, is the procedure by which we make explicit the application conditions of concepts by appeal to intuitions (i.e., expressions of conceptual competency) concerning whether a concept applies in some conceived scenario.

Although many will find this austere account of conceptual analysis and the corresponding account of intuition objectionable, it is not our goal to defend it here. We introduce this account to set the stage for one way of thinking more carefully about the methodological constraints on conceptual analysis that helps to show why it is not a comprehensive methodology for theorizing about *ST*. If the reader has some other preferred account of the nature of conceptual analysis, intuition, and other related notions, making the relevant alterations ought not affect the general point we wish to make.

We are now positioned to consider whether conceptual analysis is apt for comprehensive and illuminative theorizing about all concepts. Our answer is in the negative. The most straightforward reasoning for denying that conceptual analysis is appropriate for theorizing about all concepts is that concepts introduced by stipulative definition are not further illuminated by appeal to conceptual analysis. Consider the concept GRUE as introduced by Nelson Goodman^[47]. Goodman explicitly stipulates that GRUE is that which applies to all things examined before some arbitrary time t just in case they are green and to other things just in case they are blue.¹⁰ We may consult our intuitions when considering whether GRUE applies to some object at a time, but this will not provide any illuminating information concerning the concept GRUE. Since the application conditions for GRUE were introduced explicitly, we merely follow the explicit rules of application specified in the stipulative act to determine whether GRUE applies in some scenario.¹¹ This is in contrast to thinking about the concept KNOWLEDGE with which we began. Conceptual analysis as applied to KNOWLEDGE is informative precisely because, prior to engaging in analysis, we lacked explicit knowledge of the conditions of application for KNOWLEDGE. Rather, we knew such conditions *implicitly*, in virtue of our grasp of the concept. Engaging in the process of conceptual analysis generates new knowledge concerning our concept by way of making known to us *explicitly* the conditions which we rely upon implicitly when applying the concept.

From this we conclude that conceptual analysis is best applied, i.e., makes the most significant advances in the generation of knowledge, in those cases in which we have some grasp of a concept implicitly with which we wish to make known explicitly the conditions for its application. Paradigmatic cases will most often be instances of concept possession that are properly said to belong to the layperson, or might be described as being in some sense ordinary, pretheoretical, or commonsense. We contend that the concept SINGULAR THOUGHT does not fall into this category, but rather it is a technical notion introduced by philosophers. To be sure, our claim here is not that the concept(s) expressed by 'singular thought' has unique, explicitly stipulated application conditions akin to GRUE. But rather, that such

 $^{^{10}}$ Goodman [47, p.74]

¹¹Of course there are further questions we could ask of the concept expressed by 'grue', e.g., whether it is a color. But it is not obvious that the responses to these questions will be analytic judgements, as opposed to there reflecting our semantic decisions about which concept 'grue' ought to express.

application conditions are guided by individual philosophers' theoretical commitments in deploying ST for certain explanatory purposes.

Claiming that there is no concept corresponding to ST among the concepts of the layfolk, or otherwise that it is not pretheoretical, is not uncontroversial. Moldovan claims that it is, in fact, pretheoretical.

There is an intuitive—that is, pretheoretical—distinction between two kinds of beliefs, intentions, desires and other propositional attitudes, or, in general, thoughts. My thought that the person I am looking at right now is very smart is very different from my thought that the inventor of the wheel, whoever she or he was, was very smart. In the former case the thought has a perceived directness and aboutness that is missing in the latter case, which is a purely descriptive thought. Roughly speaking, this is the distinction between singular and general thoughts...

[93, p.90]

Pace Moldovan, we do not share this intuition. We readily admit that there are intuitive differences between the thought that the person I am looking at right now is very smart and the thought that the inventor of the wheel, whoever she or he was, was very smart; however, it is not clear to us that the intuitive difference is founded in distinguishing whether some pretheoretical concept of ST applies. One difference is that the first thought is plausibly accompanied by perceptual phenomenology and the second is not.¹² We also agree that the difference between the thoughts is plausibly located in a difference in aboutness, but we do not think there is any commonsense or pretheoretical notion SINGULAR ABOUTNESS as opposed to GENERAL ABOUTNESS. Rather, there may be some commonsense concept that is ABOUTNESS, but it is a philosophical innovation to distinguish different varieties.

As Moldovan points out, one may attempt to draw out the alleged pretheoretical and intuitive difference between ST and general thought by appeal to locutions such as "thinking of" or "having in mind" a particular individual. In opposition, we claim that these intuitive

 $^{^{12}}$ If one maintains the second thought is accompanied by some perceptual phenomenology, it is at least very different in phenomenal character than that which is accompanied by the first thought.

distinctions only become apparent once one already has some theoretical commitments regarding ST in mind. That is to say, to take a famous example from Quine [107], one may desire any sloop whatsoever or one may desire some particular sloop, but that one desires some particular sloop is not telling of whether one has a ST prior to adopting some theoretical commitments regarding the application conditions of a concept of ST. For example, one may desire that sloop, or one may desire the first sloop ever crafted, or one may desire the sloop owned by Quine himself; in each case, some particular sloop is desired, and we might feel pressure to say, for each desire, that one has some particular sloop in mind or that one is thinking of some particular sloop, but it is not clear that there is pressure to say that each desiring is intuitively singular. From the opposite direction, one may hold the belief that the tallest mountain is located between Tibet and Nepal. Arguably, such a belief is singular with respect to Tibet and Nepal, however, many would disagree that someone who holds such a belief is thinking of, or has in mind, Tibet and Nepal. Rather, an individual who holds such a belief is thinking of the tallest mountain.

On the face of things, a good marker for a concept being pretheoretical or commonsense is for there to be a term that appears in ordinary discourse which expresses that concept, such as, 'knowledge' expressing KNOWLEDGE in ordinary English. Given that there is seemingly no ordinary English analogue of the term 'singular thought', we maintain it is a philosophical term of art to which the long arm of conceptual analysis has limited reach. Using other ordinary language locutions, such as "thinking of" or "having in mind", as markers of *ST* is more aptly explained as a consequence of philosophical theorizing that concerns how to go about applying the technical philosophical concept to ordinary linguistic practices. Of course, the layperson may have many concepts that are not given linguistic expression in the language(s) they speak, but it is to be expected that it is an exception rather than the rule for speakers of the same language to share a common concept, such that it may counted ordinary, and yet have no linguistic expression for it in their shared language.

The history of the discussion of ST is also suggestive of it being a theory-laden concept

introduced by philosophers. The origin of the specific English expression 'singular thought' is difficult to track down, but it appears to have arrived on the philosophical scene in the discussion surrounding object-dependent thought in the 1980's.¹³ In the contemporary, the discussion of ST is widely acknowledged to stretch back to Russell as a result of his distinct package of metaphysical, epistemological, and semantical commitments. As discussed in Chap. 1, the traditional Russellian view of ST is that STs are those thoughts that have objects as constituents of the thought's propositional contents. Qua theory-ladenness, this positions requires at least: (i) epistemic commitments regarding what sorts of propositions agents may be related to in thought, (ii) metaphysical commitments about the nature of propositional contents, and (iii) semantical commitments regarding the contents of thought and speech.

Although the contemporary discussion about ST is traceable and largely attributed to Russell, discussion concerning the phenomenon may also be found in the Modern era in Kant's philosophy. Hanna [54] argues that Kantian *intuition* is singular and puts one into cognitive rapport with an object such that intuition is relational and object-dependent.¹⁴ And if we direct our attention even further into the past, we find ST, understood as being in some sense fundamental to our mental lives, may have been first introduced into philosophical discussion by Ockham in the Medieval era, as argued by Normore [97].

Ockham held a view about thought that theorists today would recognize as proto-Langauge-of-Thought.¹⁵ Thought is singular, on Ockham's view, owing to the kinds of elements that appear in our mental language and how they are introduced. Moreover, the elements that are constituents of thought in Ockham's mental language are not clearly pretheoretical commitments, as highlighted by Normore [97, pp.117–118].

¹⁴Hanna [54, 117–118]

¹³In fact, the earliest source in which we have been able to find the precise expression thus far is McDowell [90].

¹⁵Normore writes, "[t]he languages that we speak are instituted ad placitum and so there is no intrinsic or natural connection between the signs of which these languages are composed and things in the world, but Ockham holds that such languages are possible only because of a relation between the signs of which they are composed and the signs of another inner or mental language." [97, p.117]

The elements of mental language are to some extent theoretical entities. We may introspectively encounter some of our concepts but it seems that no mental language theorist, medieval or twentieth century, thinks that we have immediate introspective access to all of them. We need principles to guide us to the features we should suppose mental language to have.

Normore details remarkably interesting overlap among Ockham's theory of mind and contemporary discussions of reference, but we merely wish to point out that, whatever interesting connections may be found between medieval theories of ST and contemporary theories, the theoretical commitments of philosophers across time periods play a substantive role in determining the conditions of application for a concept of ST.

This concludes our negative appraisal of ST understood as being a pretheoretical concept that will be illuminated by appeal to conceptual analysis. We now briefly offer a positive construal of how to approach comprehensive theorizing about ST, in terms of conceptual engineering, that structures our approach for discussing extant theories of ST in the rest of the chapter.

4.1.2 Conceptual Engineering

An alternative approach to developing a theory of ST is to begin by identifying the relevant explanatory work the notion of ST is supposed to perform, that is, by identifying the theoretical role(s) for ST, and then to assess whether there are any extant theories of STwhich accommodate the explanatory role(s) it is supposed to serve. In the event that there is no unique concept expressed by theorists use of 'singular thought' that meets all of the theoretical purposes to which the concept is intended to be deployed, we must weigh the theoretical benefits of distinct concepts, SINGULAR THOUGHT₁,...,SINGULAR THOUGHT_n, to constrain theory choice. We understand this approach, in contrast to the conceptual analysis approach outlined above, as one that is best understood within the framework of so-called 'conceptual engineering'. We shall understand conceptual engineering in the way that it is introduced and discussed in Chalmers [18]. As characterized broadly by Chalmers, conceptual engineering is "the process of designing, implementing, and evaluating concepts."¹⁶ On this way of understanding conceptual engineering there are three stages during the process of conceptual engineering: (i) design, (ii) implementation, and (iii) evaluation. The design stage is that during which one constructs concepts; to do so, one may attempt at giving a definition, or one may state the role that the concept is intended to play in our theories, or one might point to paradigm instances to which the concept applies.¹⁷ The design stage may very well involve some degree of conceptual analysis, yet this is only a part of the more comprehensive methodological framework. During the implementation stage the concept is introduced and used in one's theorizing, and one attempts at persuading others to adopt the concept. In the evaluation stage one assesses the extent to which the engineered concept succeeds in bearing theoretical fruit, or perhaps the appropriateness of the concept in itself.

Chalmers argues that conceptual engineering ought to be understood more broadly than it is typically taken to be, i.e., to include not only cases of conceptual re-engineering, but also de novo conceptual engineering. Ordinarily, the discussion of conceptual engineering to some concept conceptual re-engineering; this is the application of conceptual engineering to some concept that is already present within our theories that we would like to improve upon. De novo conceptual engineering is the introduction of a new concept into our theoretical framework in order to yield some theoretical benefit. If we are correct about the status of ST as an instance of a technical philosophical notion in the midst of conceptual engineering, then the concept was de novo at some point (perhaps with Russell or with Ockham, or some time even earlier), and we have been in the process of conceptual re-engineering for quite some time.

 $^{^{16}[18,} p.2]$

¹⁷The way we are understanding concepts it appears a category mistake to say that they may be *designed* or *constructed*—for concepts *qua* universals are not created or modified; instead we might think of conceptual engineering as the process of modifying *which* universal a term is used to express. This points to an issue determining *what* entities are the 'concepts' under discussion in conceptual engineering. However, a full survey of views of concepts and how conceptual engineering ought to be understood in relation to them must be set aside.

One technical philosophical notion we take to be a paradigm case for which conceptual analysis alone can provide few illuminating conditions is that of supervenience. As well, Chalmers treats supervenience as a paradigm case of conceptual engineering; about which Chalmers [18, p.4] states the following.

For me, the concept of supervenience is a paradigm example of conceptual engineering. Someone once said supervenience has the smell of something that was thought up in the metaphysics lab. One class of properties supervene on another class if when you duplicate properties in one class, you duplicate properties in the other. This concept was engineered over the twentieth century. Moore had it without the name, Hare introduced the name, Davidson and Kim and others made much of it. To me that's paradigmatic conceptual engineering. And indeed the notion of supervenience was once thought to be one that could do a lot of philosophical work that previous concepts like identity might have been hoped to do. Then later on people thought that supervenience doesn't do that work so well, so they introduced concepts like grounding.

These considerations seem to apply mutatis mutandis to ST. It has the smell of something resulting from a concoction of epistemological, metaphysical, and semantical ingredients. Some, like Russell, discuss the notion without having a name for it, and others perhaps introduced the name, e.g., McDowell, and still others have spilled much ink making more of the concept. But it is worse off than supervenience, as there is no clear and concise way to state what ST is taken to be. Within the literature one finds a variety of ways of stating what it is taken to be that align with the different ways one might design a concept in the process of conceptual engineering. Some might get a handle on ST by providing it a definition, or some might get a handle on it by stating what it is intended to explain, or some might get a handle on it by pointing to paradigm instances. This is highly suggestive of ST as a concept that is in the process of being conceptually engineered.

If we are correct about ST as in the process of being conceptually engineered, then it is not fully adequate to attempt to evaluate whether a proffered theory of ST is correct by appeal to conceptual analysis. Instead of asking, what is singular thought? We should be asking, how ought we to think of singular thought? In point of fact, we think that the expression 'singular thought' is in the thralls of, to borrow another expression from Chalmers, homonymous conceptual engineering.¹⁸ This is conceptual engineering as applied to a concept expressed by some term that already has a meaning in a language. Prior to the 1980's 'singular thought' was not a common expression in philosophical parlance. Since the expression was introduced by McDowell different theories have been forthcoming that all claim to be theories of ST. Unfortunately, as Chalmers notes, this can lead to confusion: having a single expression that expresses different concepts on different occasions within theoretical contexts leads to equivocation. And we believe this is the trap in which the term 'singular thought' finds itself. Theoretical progress is delayed because there are multiple concepts being expressed by the use of the same term, and this has led philosophers to believe that they are each talking about the same phenomenon when they are in truth led to confusion as a result of equivocation.

If we suppose that we are correct that there are multiple concepts expressed by the term 'singular thought' floating around, then our answer to the question 'how ought we to think of singular thought?' might require a conceptual pluralist response. Such a response would be akin to the following: we ought to think of 'singular thought' as used to express a variety of different concepts, each with their own theoretical benefits (presuming they earn their keep), that ought to be kept distinct. Part of the continued project of conceptually engineering ST would be to sort out the various notions appealed to in the literature, distinguish them by name to avoid equivocation via homonymy, and evaluate them for their theoretical utility. In the next section, we shall distinguish concepts of ST to avoid equivocation; we leave it up to theorists that favor them to ultimately substantiate their utility.

4.2 Extant Theoretical Roles of Singular Thought

In the previous section we provided motivation for adopting the stance of the conceptual engineer towards ST. We believe this approach is most suited to develop a theory of ST

 $^{^{18}[18, \}text{pp.9-12}]$

owing to it arguably being a technical philosophical notion to be designed, implemented, and evaluated, as opposed to simply analyzed.¹⁹ Moreover, we believe that there are multiple concepts in the literature expressed using the term 'singular thought' that are in the process of being simultaneously engineered but ought to be distinguished from one another. One way in which we can get a grip on, and distinguish, the different concepts equivocated upon using the term 'singular thought' is to look towards the variety of theoretical roles to which singular thought is alleged to fill. Insofar as there are distinct and fruitful theoretical roles in which no single theory satisfactorily accounts for, we should have reason to believe that multiple concepts are present. If we can make this case for what is purportedly discussed using the term 'singular thought', then we will have shown 'singular thought' is in fact homonymous and equivocal; i.e., that there are distinct concepts being discussed and equivocated upon. Our goal for this section is to make good on this claim.

The way in which we shall proceed is by considering the variety of explanatory, or theoretical, purposes for which a notion of 'singular thought' has been deployed. There are numerous to be found in the literature, and we make no claim that those we shall consider form an exhaustive list. Among the explanatory purposes to be found, which we shall discuss, are the *role in psychological explanation*, *cognitive role*, *epistemological role*, and *phenomenological role*. We consider each theoretical role in turn, beginning with the role in psychological explanation.

4.2.1 Role in Psychological Explanation

The contemporary discussion of ST is largely derivative of the discussion in the 1980s when the term was first introduced into philosophical vernacular. We begin with the theoretical role that ST is supposed to play in psychological explanation given that (i) this is primarily what the discussion concerning ST in the 1980s was centered around and (ii) the role of thought in psychological explanation is a central concern in philosophical theorizing about

 $^{^{19}\}mathrm{Albeit}$ analysis may still serve an indispensable role in the steps taken during the process of conceptual engineering.

the mind more generally. Additionally, the claim that appeal to ST is necessary for the explanation of intentional action in particular circumstances is something that does not receive as much attention in the contemporary, but provides compelling motivation for a traditional understanding of ST, inherited from Russell, as a kind of mental state with object-dependent content.

When discussing the role of ST in *psychological explanation* or the *explanation of intentional action*, we have in mind the kind of explanation of action which makes reference to psychological states that are familiar to the layperson. Namely, action explanation that is present in *folk psychology* or, otherwise, *belief-desire psychology*; i.e., explanation of actions which appeal to propositional attitude states. If we would like to provide an everyday explanation as to why Adam performed the action of going to the fridge and taking out a beer, we would ordinarily do so by appealing to Adam's desire to drink beer and his belief that there is beer in the fridge, *ceterus paribus*. The role that ST is supposed to play in such explanations is captured by Peacocke's [98, pp.205–206] indispensability thesis appealed to in Chap. 1:²⁰

No set of attitudes gives a satisfactory psychological explanation of a person's acting on a given object unless the content of those attitudes includes a demonstrative mode of presentation of that object.

This passage requires a bit of unpacking in order to get at precisely what Peacocke has in mind.²¹

When giving a psychological explanation of an agent acting on a given object, we are to think of there being some uniquely existing, typically concrete, object with which an agent is engaging. For instance, we may want to explain why Adam is drinking *that* beer, as opposed to explaining why Adam is drinking beer. Peacocke's claim is that an appropriate psychological explanation of why Adam is drinking *that* beer will require, as part of the

²⁰Some content below is repeated from Chap.1.

 $^{^{21}}$ There is much dispute over how we should understand the nature of the propositions that serve as the contents of attitudes. We set aside these complexities and assume the orthodoxy in the literature on ST which treats the contents that intentional states relate agents to as structured propositions.

content of some attitude(s) among the set appealed to in the explanation, a demonstrative mode of presentation of the beer which Adam is drinking. Appeal to demonstrative modes of presentation is a particularly Fregean (and Neo-Fregean) or Neo-Russellian commitment. If we wished to modify the indispensability thesis to discard talk of modes of presentation, we might instead state the following.

No set of attitudes gives a satisfactory psychological explanation of a person's acting on a given object unless the content of those attitudes has as a constituent the object acted upon.

This characterization reflects the claim famously made by Russell in his letter to Frege, "I believe that in spite of all its snowfields Mont Blanc itself is a component part of what is actually asserted in 'Mont Blanc is more than 4,000 metres high'."²²

To illustrate the indispensability thesis we may consider an example that Peacocke discusses of an individual who consumes the life-saving pills contained in the bottle in front of them. Peacocke queries,

Would such an explanation of the agent's consuming the pills from the container in front of him be satisfactory if he thinks just this: "The container left by the doctor has the pills I need to live"?...

and responds,

... No: for that would not explain his acting on the container in front of him unless he also thought: "The container left by the doctor is that container", where 'that container' picks out an object presented to the subject in a particular way in perception.

[**98**, p.207]

The relevant point here is that in order to explain the agent acting on *that* container we must appeal to some thought the agent has which has *that* container (or an object-dependent mode of presentation thereof) as a constituent of its content. Importantly, this provides one

 $^{^{22}[45,} p.169]$

way of understanding the concept expressed by theorists' use of 'singular thought'. Such an understanding of the concept is exemplified by the account detailed by Armstrong and Stanley [4, pp.205–206],

One very common account of the nature of singular thought assumes what we shall call a Russellian Structured Account of Propositions, according to which contents are represented by means of structured n-tuples of objects, properties, and functions. A proposition is singular, according to this framework, if and only if it contains an object as a constituent.

On this account some thought T is a ST just in case it is a psychological attitude that relates an an agent to a singular proposition. Singular propositions standardly may be understood as either containing an object as a constituent, i.e., Russellianism, or as containing an objectdependent sense, i.e., Fregeanism. To avoid homonymy, we shall refer to this concept of STas SINGULAR THOUGHT_o (ST_o)—where the subscripted '_o' captures the object-dependency:

T is a singular thought if and only if it is a psychological ST_o : attitude that relates an agent to a singular proposition.

The theoretical motivation for adopting this concept of ST is precisely that which is captured by Peacocke's indispensability thesis and the role that ST is alleged to play in the explanation of intentional action.

This serves to introduce one popular, traditional conception of ST, the object-dependence conception, and the motivation for endorsing such a conception. Of course, this account and its motivations are not without dissent. Such an account flies in the face of a popular methodological attitude endorsed in the philosophy of psychology and cognitive science introduced by Putnam [104] and popularized by Fodor [39], namely, *methodological solipsism*. Methodological solipsism, as described by Putnam, is "the assumption that no psychological state, properly so-called, presupposes the existence of any individual other than the subject to whom the state is ascribed."²³ Importantly, the indispensability thesis appears

²³[104, p.136]; as noted by Bach [5, p.125], this statement of the assumption is ambiguous between at least

to violate the methodological solipsist assumption quite straightforwardly: indispensability requires reference to object-dependent thoughts in order to provide complete psychological explanations for certain kinds of actions directed at individuals. Object-dependent thought presupposes the existence of individuals other than the subject to which the thought is ascribed.²⁴ Methodological solipsism denies such presuppositions; thus, the indispensability thesis and ST_o are in violation of methodological solipsism.

Whether one should accept methodological solipsism partially depends on whether one thinks that the relevant explanandum, action, ought to be individuated widely or narrowly; i.e., whether action ought to be thought of as essentially relating individuals to things in the world or whether action ought to be understood merely in terms of an individual's bodily motions, respectively. Facts about our practices when explaining the observable actions of others suggests we should individuate action widely; yet facts about our practices considered from our own, first-personal perspective suggest we ought to individuate action narrowly. To borrow an example from Noonan [96], consider an individual that believes to have seen a butterfly, fetches their net, and runs around swiping the net in the air at the location they believe to see the butterfly. We might suppose there are two worlds in which this occurs: one veridical world (W_v) in which a butterfly is present before the agent, and another hallucinatory world (W_h) in which an intrinsic duplicate of the subject in the first world has the same phenomenology and is in the same brain states, but in which no butterfly is present. From the third-personal perspective—the viewpoint of the observer—it appears type distinct actions occur in W_v and W_h . In W_v , the agent is engaged in butterfly catching; but in W_h the agent is engaged in mere net swatting (for there appears to the observer no butterfly to be caught). Yet from the first-personal perspective, it appears there is a single,

two readings. Formal Methodological Solipsism (FMS) is rendered as: "...psychology should work on the assumption that propositional attitudes are realized by relations to symbols whose only relevant properties are formal." And Conceptual Methodological Solipsism (CMS): "...insists that internal representations should be treated as having not only formal but also conceptual properties, which are not reducible to or fully explainable by formal properties."

²⁴Of course, this is under the supposition that the relevant object is not a part of or identical to the subject having the thought.

i.e., type-identical, action to be explained in both W_v and W_h ; namely, butterfly hunting. The intuition that the methodological solipsist endorses is that our explanations of action for hallucinatory cases and veridical cases ought to be the same, owing to the fact that the experiences and the brain states, which are the proximate causes of action, of the agents are type-identical in each case.²⁵

Some have argued that methodological solipsism is consistent with ST qua object-dependent thought; others have argued that we ought to reject object-dependent thought altogether in favor of methodological solipsism; and still others reject methodological solipsism but argue that the necessity of ST_o for the explanation of intentional action is implausible and not a compelling reason to endorse object-dependent thought.²⁶ For our purposes, we shall set the discussion of methodological solipsism and its relationship to ST aside. We introduce it to indicate that there is resistance to the motivations for thinking of ST as object-dependent, and hence, that there are other theoretical motivations for appealing to some notion of STto which now turn.

4.2.2 Cognitive Role

We began with discussion of ST's purported role in psychological explanation since it is the historical root of the contemporary discussion, and the concept ST_o motivated by it is one of the most influential ways to understand what concept is expressed by 'singular thought'. We now turn our attention to what we take to be, perhaps, the second most influential of

²⁵These competing attitudes are succinctly described by Lycan [89, p.236],

[&]quot;It must be conceded at once that if we take a relentlessly narrow view of our explanandum, knowledge of truth-conditions will not figure *per se* in our explanans...Neither a sentence's having a particular truth-condition nor a speaker's knowing that the sentence has that truth-condition, nor typically even just the speaker's believing that the sentence has the truth-condition, is (entirely) in the speakers head, and what is not in the head does not *in propia persona* produce behavior conceived as physical motion of the body. My belief that "Snow is white" is true iff snow is white is indistinguishable in causal role from Twin Bill's belief that "Snow is white" is true iff Twin snow (i.e., frosty crystalline XYZ) is white; the difference in propositional content between our beliefs about truth-conditions is irrelevant to our matching behavior, and so plays no direct role in explaining it. If semantics helps to "explain behavior," then "behavior" must be understood more broadly than in the sense of particular physical motions of individual bodies."

²⁶See Bach [5], Noonan [96], and Carruthers [17], respectively.

motivations for appealing to ST, and the most prominent understanding of ST that results from this motivation in the contemporary literature. Many theorists appeal to the *cognitive role* of ST as that which distinguishes it from other kinds of thought, e.g., descriptive or general thought. Unfortunately, what is precisely meant by 'cognitive role' is usually left underspecified. Additionally, oftentimes those that appeal to cognitive role when specifying what is unique to, or perhaps even constitutive of, ST happen to also endorse different variations of a Mental Files Framework; first introduced by Grice [52], P.F. Strawson [134], and Perry [101], and later popularized by theorists such as and Jeshion [66] and Recanati [111]. Recently, mental files have become an even greater part of the discussion surrounding $ST.^{27}$

What is more, theorists often explicitly link their endorsement of the importance of cognitive role (or function) to the Mental Files Framework, as evidenced by the following passages.

The cognitive role of singular thought—the liberalization of the metaphor of 'purporting'—is here explained in terms of the mental files which collect the information we associate with the things we think about.

Crane [20, p.38]

With respect to the nature and structure of singular thought, Cognitivism takes very seriously the account of singular thought as thought from mental files. On this view, cognition provides an overarching systematic organization of our beliefs and thoughts and other attitudes. Some of them—those that are singular—enjoy a file folder system of organization. Singular thought about an individual is structured in cognition as a type of mental file.

Jeshion [66, p.129]

The main idea behind the file metaphor as I use it is the following. In his cognitive life the subject encounters various objects to which he stands in various contextual relations... The role of a mental file based on a certain acquaintance relation is to store information acquired in virtue of that relation.

 $^{^{27} {\}rm For}$ recent discussion, see the anthology concerning mental files and singular thought compiled by Goodman et al. [50].

Recanati [110, p.157]

These passages suggest that the cognitive role of ST ought to be understood in terms of mental files and the role that they play in cognition. Thus, if we want to get a better grip on how we ought to understand ST qua cognitive role, we should look to the sorts of role that mental files are taken to play in our cognitive lives. It is worth noting that the final passage from Recanati also introduces a certain epistemic role mental files might be taken to play, but we set aside inquiry into epistemic role for the time being.

As indicated by the Recanati passage, mental file talk is metaphorical talk that treats certain thoughts concerning individuals as organized into dossiers. One might attempt to extrapolate on the metaphor in order to fill out what cognitive role mental files are purported to play. For instance, akin to a dossier concerning some individual, mental files may be taken to be relatively stable stores of information concerning an individual that are updated as new information is attained. This information is stored in one place for the subject to retrieve and serves as the subject's way of identifying the individual. This way of thinking about mental files is illustrated by Crane [20, p.140]:

In the case of singular thought, the psychological episodes are best construed in terms of mental files, whose cognitive role consists partly in the way they respond to information (or supposed information) about the identity of the object referred to.

Jeshion distinguishes three roles (or functions) that mental files are purported to have: the identity-function, the bundling-function, and the singular-function. Our extrapolation of the file metaphor is suggestive of at least two of these functions, the identity-function and the bundling-function. The identity-function is that "[mental files] constitute the agent's individuation of objects and mode of identification of objects."²⁸ Hence, the cognitive role of mental files partly consists in storing information concerning the individuation and identification of an object to which a file refers. Regarding the bundling function Jeshion claims

 $^{^{28}[66,} p.131]$

that "... insofar as mental files serve as vehicles for bundling together an agent's fund of information about a particular individual, they provide an economical and efficient means of sorting, retrieving, and adding information on a particular individual." This function highlights the role of mental files as stable stores of information that subjects employ to package together information concerning an individual.

As noted by Jeshion, most accounts of mental files only recognize the identity and bundling function. In addition to these, Jeshion posits the singular-function and claims that "[t]hinking about an individual from a mental file is constitutive of singular thinking about that individual."²⁹ Jeshion's justification for mental files having a singular-function is derived from research on the perception of objects; they further unpack the notion of singularity of thought from mental files in the following way.

Thinking of an individual from a mental file is just thinking of an individual with a mental name or demonstrative. And, because thought with mental names and demonstratives is ontogenetically rooted in the coupling of them with FINSTs, thinking of an individual with a mental name or demonstrative is essentially singular.³⁰

[**66**, p.135]

A 'FINST', or 'finger of instantiation', is an empirically motivated mechanism that is posited by Pylyshyn [105] to explain how we visually, non-conceptually track and attend to objects in the world by way of individuating and indexing those objects. The suggestion appears to be, then, that the singularity of thought consists in the singularity of the vehicles, presumably some cognitive particulars, which are constitutive of thought; the singularity of the vehicles of thought consists in their non-conceptual referential capacities. There is a lingering question here as to whether it is required that mental files play all three roles outlined above or

²⁹[**66**, p.132]

³⁰On an unrelated note, this passage from Jeshion identifies thinking of an individual from a mental file with thinking of an individual with a mental name or demonstrative. This suggests that mental files are identical to mental names or mental demonstratives; yet if that is so, it raises the question, what relation do mental names and demonstratives bear to the information stores that are supposed to constitute the dossier aspect of mental files?

whether it is possible for a mental file to play some roles and not others. If it is possible that, say, a mental file could play the identity and bundling roles in the absence of the singularity role, then it follows that thinking via mental files *per se* is not constitutive of singular thought. But thinking via *singular* mental files is constitutive of singular thought. If this is not a possibility, then there must be some conceptual connections between the cognitive roles that mental files are purported to play such that no mental file could fail to fulfill all three functions.

If Jeshion's view is correct, then being *singular* is directly built into the cognitive role of ST as a matter of cognitive architecture. And all that is required for some thought to possess this role is for the episode of thinking to be *from a mental file*. On this view, mental files are cognitive vehicles and, insofar as the tokening of a cognitive vehicle does not require the existence of any object, mental files are not object dependent.³¹ We have now arrived at, in full view, our second theoretical conception of singular thought. Let's refer to this concept as SINGULAR THOUGHT_c (ST_c)–where the 'c' subscript stands for 'cognitive role'. Thus we have:

T is a singular thought if and only if it is an episode of ST_c : thinking via a mental file.

Our take away here is that ST_c is theoretically motivated in a way distinct from that of ST_o . Whereas ST_o is introduced as a requirement for the explanation of action, ST_c is introduced to account for how we stably organize, retrieve, and update information concerning an individual, or purported individual, in our cognitive lives. These motivations are clearly divided, as the explanation of action appears to be intuitively externally constrained, *modulo* the methodological solipsist assumption, whereas the organization of information in a cognitive system and the functional role of cognitive vehicles is, in many ways, intuitively understood as internally constrained.³²

³¹One could hold that tokening a mental file is object dependent, but this is not a straightforward consequence of adopting a mental files view.

 $^{^{32}}$ It's worth comparing the statement of ST_c with that of ST_o . Recall, ST_o : T is a singular thought if and

4.2.3 Epistemic Role

A concept of ST that is related to both ST_o and ST_c is one that seeks to capture the theoretical importance of ST in terms of its epistemic role. This is not surprising given that a traditional Russellian analysis of ST requires acquaintance with the object with respect to which a thought is singular; acquaintance, as traditionally conceived, is a special sort of epistemic relation that obtains between an agent and an object of knowledge. We shall refer to the epistemic concept of ST, to be explicated, as SINGULAR THOUGHT_e (ST_e) — where the 'e' subscript stands for epistemic role:

T is a singular thought if and only if it has a distinctive type ST_e : of epistemic profile in a subjects's mental life.

There are at least two ways to understand the appeal to a 'distinctive type of epistemic profile'. On one understanding, the thought may be said to depend upon an acquaintance constraint that relates a subject to an object. This ties ST_e closely to ST_o since if a subject must be acquainted with an object to have a singular thought about it, this will require that the object exists. Yet, another understanding of it treats the thought as having a particular inferential role. This links ST_e more closely to ST_c since the mental files framework is sometimes deployed to capture a distinctive cognitive role and inference (done well) may be understood as a particular type of epistemically rewarding cognitive process.

Although ST_e may be grouped with either of the other concepts, it ought to be kept distinct from them, since some version of ST_e may be endorsed without endorsing either ST_o or ST_c . Consider the following passage from Rachel Goodman [48, p.3].

Singular thoughts, we're assuming, are thoughts (mental states) with singular content. *Relationalists* claim that what accounts for the singular content of a thought is that it it is about the object, with respect to which it is singular, in

only if it is a psychological attitude that relates an agent to a singular proposition. In the statement of ST_c the relevant mental kind under consideration is an *episode of thinking*; in ST_o the mental kind under consideration is a *psychological attitude*. It is curious whether one's preferred mental ontology influences theorizing about what is constitutive of ST, or vice versa. Moreover, if these ontologies are not easily translatable, then one might be led to believe the notions analyzed by appeal to them must be distinct.

virtue of some causal-informational relation to the object. What determines the reference of my singular thought about Obama is that I stand in a relation (like perception) to him, allowing me to gain information about him. Opponents of relationalism reject this but, for the most part, recognize the burden of providing a replacement conception of what distinguishes singular thoughts—that is, of specifying some cognitive, epistemic, or psychological 'singularity-making' feature that singular thoughts share and descriptive thoughts lack. An influential but under-explained proposal is that singular thoughts are *inferentially* distinctive: they alone can feature in a distinctively 'direct' form of inference known as an inference that 'trades on identity.'

This passage is instructive in a number of ways. First, it distinguishes between relationalist views of ST and nonrelationalist views; it tells us the ways in which one might attempt at giving a nonrelationalist account of ST: by appeal to cognitive, epistemic, or psychological role. Second, the relationalist and nonrelationalist distinction gives us another way of grouping ST_o and ST_c ; ST_o is inherently relationalist, in virtue of object-dependency, and ST_c may either be relationalist or nonrelationalist depending on which constraints one endorses for the tokening of a mental file. Indeed, this tracks with our appeal to external vs. internal constraints associated with the concepts. Third, the passage acknowledges the 'influential but under-explained' account of ST in terms of its inferential role. On our way of carving up the landscape, explicating ST in terms of its inferential role is to endorse an epistemically motivated concept of ST, that is, ST_e . This is owing to the fact that inference plays an important role in the acquisition of knowledge. In this vein, one way of understanding the talk of inferential role is in terms of what we are positioned to come to know on the basis of having STs.

So, in order to cash out ST_e we may either endorse a relationist view which ties it to acquaintance or we need to characterize an appropriate nonrelationist view in terms of a special inferential role. In order to characterize a nonrelationst view, we need to answer the question: what sorts of inferences are epistemically rewarding which can be made on the basis of having some thoughts and not others?

Goodman considers an influential answer to this question, namely, the class of inferences

that are distinctive of ST are those that may be said to trade on identity. To identify the relevant class of inferences, then, the project is to identify what it is for an inference to 'trade on identity' and then to identify the relevant class of inferences that are constitutive of ST by generalization over the properties that are unique to an inference which trades on identity. Goodman details two potential accounts of what 'trading on identity' may amount to and finds both of them wanting. We adopt Goodman's nomenclature, **TI-1** and **TI-2** for referring to the two notions of 'trading on identity'. Here is the first.

(**TI-1**) An inference trades on identity when it is manifestly truth-preserving from the subject's point of view partly in virtue of encoding (not stating) sameness of extension across its premises. (p.8)[48, p.8]

And here is the second potential account, derived from the work of Dickie.

(**TI-2**) An inference trades on identity when the direct coordination relations between mental states that serve as its premises are grounded by a non-descriptive tracking process. (p.10)[27, p.10]

Note, in **TI-1**, the locution 'from the subject's point of view' which is, again, instructive regarding whether theorists are considering internal constraints or external constraints; in this case, it is internal constraints.

Against **TI-1** Goodman argues that it fails to distinguish between arguments that would be ordinarily taken to include only general premises and those that do not; i.e., it does not serve to carve out a space of inferences unique to *ST*. Consider the following arguments.

a is F

S1) $a ext{ is } G$

There is something that is F and G

The H is F

S2) The H is G

There is something that is F and G

In either case, whether 'a' is in subject position in the premises or 'the H' is in subject position, no additional identity premise is needed (a=a or the H = the H) in order to establish that sameness of extension in the premises. Given that the second argument appears to include merely general premises, this notion of 'trading on identity' fails to carve out a distinct class of inferences that may be said to be constitutive of singularity.³³

Against **TI-2** Goodman argues that its legitimacy requires a further distinction between descriptive update processes and singular update processes. Without getting into the weeds, Goodman ultimately lands on the idea that, if a notion of singular update process is needed, then this must be understood in relationist terms; and so, the account of 'trading on identity' that appeals to **TI-2** does not offer an account of *ST* that is nonrelationist. In addition, most ordinary instances of update processes that ground inferences are mixed, i.e., resisting classification as either singular or descriptive, and so do not serve to carve out a unique class of inferences that are singular.

Thus, if Goodman is correct, the notion of 'trading on identity' will not deliver us an account of ST on the basis of a there being some unique class of inferences. And so, whatever legitimate notion of ST_e there may be will either require commitment to acquaintance, which may be rejected while endorsing either ST_o or ST_c , or specifying a nonrelationist view still in need of explication. We are optimistic that there is some theoretically useful epistemic

 $^{^{33}}$ It is worth noting that S1) is, in some sense, more *epistemically secure* than S2). For instance, suppose an agent is making the inferences in S1) and S2) over a short temporal duration. At t_1 and t'_1 they entertain the first and second premise in S1) and S2), respectively. At some later time t_2 and t'_2 they infer the conclusion of each argument. However, unbeknownst to the agent the individual that satisfies the H changes at t_2 and t'_2 . The agent reasoning as modeled by S1) at t_2 will certainly arrive at a true conclusion, and come to know it. The agent reasoning as modeled by S2) at t'_2 may arrive at a true conclusion, but intuitively they have been Gettiered and perhaps do not know it. We could of course try to build a mirror situation for S1), if we do not hold fixed a's properties, i.e., if they lose either F or G but some other individual shares them, then the agent may be Getteried at t_2 as well. But this same sort of case infects S2), if we do not hold fixed The H's other properties. The epistemic security gained for S1) is a function of the referential fixedness of a; by the same token, the epistemic insecurity of S2) is a function of its denotational fluidity.

account to be given that doesn't require acquinatance, that is, some account according to which a unique class of inferences is distinctive of ST, but more work needs be done to develop such an account. Importantly, separate from ST_o and ST_c , ST_e is introduced for a distinct explanatory purpose. That is, to explain the epistemic uniqueness of thoughts grounded in certain sorts of knowledge generating relations or inferences. And this is accomplished by appeal to either a kind of thought that requires such relations to have knowledge of an individual or a kind of thought over which one can perform unique inferences and expand one's knowledge concerning an individual, respectively.

4.2.4 Phenomenological Role

The last concept expressed by 'singular thought' that we shall consider is concerning the phenomenology of thought, or the phenomenological role ST is alleged to play. This notion appears in a few places in the literature, but does not share the same amount of attention as the other concepts to which theorists appeal. Discussion of this understanding of ST can be found in Crane [20] and Moldovan [93]. Crane claims that "[s]ingularity is a matter of the cognitive—that is, the psychological or phenomenological—role of the thought."³⁴ And Moldovan claims while discussing rigidified definite descriptions that they intuitively do not count as singular for the fact that "[t]he perceived directness and immediacy, which are phenomenological characteristics of singular thought, are not present in this case."³⁵

The relevant individuation criteria appealed to here is that of distinguishing kinds of thoughts by their phenomenology; and the underlying claim is that some of our thoughts have a phenomenal character as of directly concerning some individual or as of an individual being immediately presented to one's mind. Thus, the concept of ST appealed to here is used to explain (or at least tag) specific alleged phenomenal differences in our mental lives. We shall refer to this phenomenological concept of ST as SINGULAR THOUGHT_p (ST_p) where the '_p' subscript stands for phenomenological role:

 $^{^{34}[20,} p.25]$

³⁵[93, p.4]

T is a singular thought if and only if it has the phenomenal

 ST_p : character as of being directly about some individual or as of having an individual immediately before one's mind.

It is not uncommon for theorists to distinguish the mental from the non-mental by appeal to what is (or could be) phenomenologically available to the subject.³⁶ Moreover we may distinguish different types and modalities of mental states by appeal to their phenomenal characters; e.g., seeing that the guitar is being strummed vs. hearing that the guitar is being strummed. Whether this sort of treatment may be extended to distinguishing ST from nonsingular thought is not so obvious. The most straightforward path to this result is to embrace the controversial thesis of cognitive phenomenology and to argue that, in addition to there being uniquely cognitive phenomenal characters, there are uniquely detectable phenomenal characters for singular and nonsingular thought.³⁷ Perhaps, as claimed by Moldovan, by appeal to the seeming directness of ST.

Although ST_p has not received as much attention in the literature on ST as other concepts, it finds historical support from those views that give much credence to the phenomenal in the individuation of mental states. However, if one is of the mind that the phenomenal and the intentional are are in some sense largely separable, then one might reject the theoretical utility of ST_p altogether. Importantly, none of the other concepts discussed in this section require commitment to ST_p and it seems to entail no commitment to any of them either. What theoretical work there is for ST_p to do is perhaps, in part, to identify different mental kinds from the subjects point of view. But the overall theoretical importance of a distinctive phenomenology of ST will largely be determined by how theoretically significant theorists take phenomenology to be, generally.

 $^{^{36}}$ For instance, Searle's [124, p.586] Connection Principle: "The ascription of an unconscious intentional phenomenon to a system implies that the phenomenon is in principle accessible to consciousness."

³⁷Whether embracing the existence of cognitive phenomenology is *required* to phenomenologically carve out a class of singular thoughts is not obvious, but it is one of the most straightforward options available to the would-be phenomenological proponent.

4.3 Is There a Unified Theoretical Role for Singular Thought?

We claim that none of the extant concepts associated with the expression 'singular thought' capture each of the theoretical roles for which it is deployed; for, each of the different concepts— ST_o , ST_c , ST_e , and ST_p —have been introduced for distinct theoretical purposes and motivations. None are fitted to capture the theoretical roles of the others for the reason that each seem to be clearly separable; i.e., one may adopt any one of them without adopting any of the others. Or one may adopt any composite grouping of them to provide a more stringent account of ST. We may arrive at unified theory of ST by adopting a theory that commits to all four. This is to claim that ST consists in relating a subject to a singular proposition, being an episode of thinking *via* a mental file, having an appropriate epistemic profile, and having a unique phenomenology. Yet, it is not clear anyone endorses such a stringent view. Rather, theorists often endorse some conditions and not others depending on which characteristics they take to be most theoretically significant.

It is not surprising that the result of theorizing about ST since Russell would have as a consequence a variety of distinct concepts that go under the heading of ST. For Russell's view originally was a marriage of various semantic, metaphysical, and epistemic claims, and since Russell's time we have seen a gradual pulling apart of these different realms in the development of philosophical subjects broadly and within the literature on ST particularly. The result has been the placement of more theoretical weight on each of the different components, and to introduce further components, in characterizing different notions of ST. That these components may be taken separately and provide the core of different ways of characterizing ST suggests that theorists have a variety of different explanatory goals in mind and are developing distinct concepts to meet them.

If there are many notions of ST, as we claim, we must take into consideration those roles that have the most theoretical benefit to help settle on which concept(s) we ought to deploy in our theorizing. Given the continued philosophical interest of each of the concepts characterized, it is probable that each have some theoretical fruit to bear in virtue of which they earn their keep. But this is not for us to decide here. Rather, we suggest that once theorists shift their attention from trying to give an account of ST that captures everyone's intuitions and instead focus on clarifying the explanatory purchase of their favored concept, then the literature may further develop those concepts to achieve their explanatory goals and demonstrate the concept's theoretical utility.

Concluding Remarks

In this chapter we aimed to make good on the claim that the development of ST ought to be seen as a project of conceptual engineering. We began by introducing an account of conceptual analysis and gave reason for thinking that theorists typically understand themselves to be latching on to one concept expressed by 'singular thought' that may be theorized about *via* conceptual analysis. We then gave a plain characterization of conceptual engineering and substantiated the claim that ST is better understood under such a framework. Following that we distinguished a variety of distinct concepts that 'singular thought' may be used to express and which ought to be distinguished to avoid equivocation. Our suggestion for further research in the area is for theorists to reorient the discussion of ST around the theoretical purposes to which their favored concept is to be deployed and to press for its development towards those goals. The result is that there may be a number of different concepts that may each bear their own theoretical fruits. Insofar as the concepts do not entail the rejection of any other (which they do not seem to) it is not necessary to reject one in favor of others, or to treat them all as properties of a single notion.

Conclusion

We close out the dissertation with a concise restatement of what we take ourselves to have achieved. In Chap. 1 we detailed an extensive history of the development of singular thought from Russell into the contemporary. We mapped how different notions of singular thought have developed out of different theoretical pressures and compared the various commitments of the views. Following that, Chap. 2 developed of view of singular thought based in singular content. We developed a position where the singularity of content consists in reified positions of propositional structure that take objects as values and which are individuated by relations of coordination to positions within other propositional structures. The pay off is a view that does not commit to any particular mental architecture, but can account for a variety of problems that the original orthodox content views faced; in particular it accounts for having distinct thoughts about nonexistent objects. Chap. 3 developed and substantiated an analyticity heuristic for determining whether a sentence expresses a singular content. This heuristic was then deployed to argue that, plausibly, the class of sentences which express singular contents is much more expansive than many would ordinarily take it to be. The final substantive chapter, Chap. 4 argued for reorienting the discussion of singular thought as a project in conceptual engineering. Therein we distinguished a number of different theoretically motivated concepts that may go under the heading 'singular thought' and motivated the claim that we need not reject some in favor of others, and which may be developed independently to meet different theoretical needs.

There is still much more to be said regarding singular thought, but we take ourselves to

have said more than we perhaps should.

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Appendix A

Tables

Russellian ST		
i	Name-like-syntax	\checkmark
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	\checkmark
v	Object-dependent	\checkmark
vi	Know-wh	\checkmark
vii	De-re-report	X
Epistemic Based Content ST		
i	Name-like-syntax	?
ii	Directness	?
iii	Object-involving	\checkmark
iv	Acquaintance	\checkmark
v	Object-dependent	\checkmark
vi	Know-wh	\checkmark
vii	De-re-report	X

Content Based ST		
i	Name-like-syntax	×
ii	Directness	✓
iii	Object- $involving$	\checkmark
iv	Acquaintance	×
V	Object-dependent	×
vi	Know-wh	×
vii	De-re-report	X

Causal Based Content ST		
i	Name-like-syntax	?
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	\checkmark
v	Object-dependent	\checkmark
vi	Know-wh	×
vii	De-re-report	×

Epistemic Mental Files ST		
i	Name-like-syntax	\checkmark
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	\checkmark
v	Object-dependent	\checkmark
vi	Know-wh	x
vii	De-re-report	×

Liberalist ST		
i	Name-like-syntax	?
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	×
v	Object-dependent	×
vi	Know-wh	×
vii	De-re-report	?

Name-like-syntax Directness	✓ ×
Directness	X
$Object\-involving$	\checkmark
Acquaintance	X
Object-dependent	X
Know-wh	X
De-re-report	X
-	Acquaintance Object-dependent Know-wh

Justificatory Convergence ST		
i	Name-like-syntax	\checkmark
ii	Directness	\checkmark
iii	Object-involving	\checkmark
iv	Acquaintance	?
v	Object-dependent	\checkmark
vi	Know-wh	?
vii	De-re-report	x