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WHAT ARE THOUGHTS?

A Dissertation Presented

by

MARK ARONSAJN

Submitted to the Graduate School of the  
University of Massachusetts in partial fulfillment  
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

February 1991

Department of Philosophy

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MARK ARONSZAJN

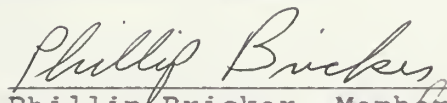
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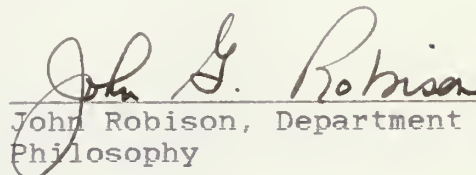
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To the memory of my parents,  
Nachman and Sylvia Lee Aronszajn,  
and to one whom, I am certain, they would have loved as much  
as I do,  
Laurene Anne Battisti.

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ABSTRACT

WHAT ARE THOUGHTS?

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Directed by: Professor Barbara Hall Partee

In this dissertation, I investigate a conception of thoughts figuring in ordinary discourse, and argue that this conception is an improvement over a certain standard conception employed in current philosophical and linguistic endeavors.

In Chapter 2, I discuss the leading principles of the standard conception, a conception according to which thoughts in general are to be identified with propositions. I also briefly preview some of the main features that distinguish the conception developed in the course of this study from the standard conception.

Chapter 4 is the heart of the thesis. I isolate a reading of (forms of) the verb 'think' that I contend is both familiar from and central to our ordinary discourse about thoughts and thinking--the "generic reading", I call it. An investigation of the relation expressed by the verb, 'think', on this generic reading, and of the correlative conception of thoughts, occupies the remainder of the study.

If this ordinary conception of thoughts is to serve the principal functions to which thoughts have standardly been

assigned, in philosophical and linguistic endeavors, then there should be a discernible sense in which it is correct to say that thoughts, so conceived, are things that sentences express. In Chapter 5, I discuss the relevant notion of sentential expression. Accounts of this notion have commonly faced a stumbling block in the case of non-declarative sentences. What sort of thoughts, for example, can imperatives or interrogatives be said to express? In Chapter 6, I explain how, on the present conception, there is a clear sense in which sentences of a variety of grammatical moods--imperatives and interrogatives as well as declaratives--may be said, with equal propriety, to express thoughts.

In Chapter 7, I discuss a fundamental thesis of the standard conception, and argue, in Chapter 8, that any account of the nature of thoughts accommodating this thesis is incompatible with the conception of thoughts arrived at in Chapter 4. Then, in order to retain this familiar conception and its benefits, a new account of the nature of thoughts must be provided. Such an account is described in Chapter 9.

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CHAPTER 1  
INTRODUCTION

I accept an old, though still widely favored philosophical idea according to which, simply put, there are such things as thoughts. By 'thoughts' what is meant, roughly, are things that can properly be said to be what a person is thinking, what has occurred to a person--the "something" we speak of when we say, more colloquially, that something has crossed a person's mind, or that something has dawned on the person. This idea has served and continues to serve as a cornerstone of much work in analytic philosophy; it figured prominently in the work of Frege, Russell and Moore,<sup>1</sup> and continues to figure prominently in the work of most who have followed in the footsteps of those three.

Support for the idea is sometimes drawn from consideration of things said in everyday discourse. It is pointed out, for example, that when we say such things as

"I'm thinking what he was thinking",

"That never crossed her mind", or

"The same thing just occurred to both of them",

it's not as if we're always saying something false. The fact is, it would be claimed, many times when we say such things, we are saying something true. A natural way to account for the truth of what we say on these occasions is to allow that there are things we refer to when we speak,



for example, of what a person is thinking, or of that which never crossed some person's mind, or of the thing occurring to two persons at some point in time.

I assume that the informal characterization of thoughts given here is familiar. Many philosophers willing to hold that there are such things as thoughts, conceive of them in accordance with this familiar gloss, so far as it goes. Many such philosophers would also allow, as I do, that the considerations of ordinary usage cited above provide at least some prima-facie motivation for countenancing thoughts, so conceived. But agreement on this much does not determine any very detailed conception of the nature of the entities to be countenanced.

What are thoughts? It is easy enough to cite categories that everyone agrees don't include thoughts: rocks, lampposts (inanimate physical objects generally), people, cats (animate creatures generally). Most everyone agrees that thoughts are not numbers, that they are not any sort of properties of inanimate, physical objects. But the question as to precisely what sort of thing thoughts are is still subject to dispute and inquiry.

The main project of this thesis is to set forth a particular conception of thoughts that, as far as I know, has had no other contemporary adherents--a conception the main outlines of which have only rarely been considered in contemporary philosophical literature.<sup>2</sup> Of course, I

believe there is more to be said for this conception than merely that it has not recently been much considered. The thesis that thoughts are lampposts of a certain sort would do as well on that count. In the next chapter, I shall offer a rough sketch of this new conception in order to contrast it in a provisional way with what I take to be the current, standard view. Presently, however, there are certain matters of terminology and conceptual background that I would like to address.

### 1.1 Relational Readings

Let us say that a reading of a verb (or verb phrase) is relational just in case, on that reading, i) it has a single complement position, and ii) introduction of referring terms in, and objectual quantification over either subject or complement position is admissible. Standard examples of the syntactic category of transitive verb--verbs such as 'kick', 'hit', 'thank', 'accept'--are clear cases of verbs that, in the present sense, admit relational readings.<sup>3</sup>

I assume that if a verb phrase has a relational reading, then it is properly symbolized, on that reading, by a two-place predicate constant. Moreover, for any such verb phrase, I assume it acceptable to employ that verb phrase itself as a predicate, with its relational reading(s) (that is, the reading(s) it has as an expression of natural

language) affording its intended interpretation(s) (as an expression of the formal calculus). Then, we can treat

x is kicking y,

x thanked y,

for example, as bona-fide open formulas, and sensibly speak of pairs satisfying them, on their intended interpretations. I assume it acceptable, too, to form complex terms with such open formulas, or to affix quantifiers to them, obtaining closed sentences formulating such claims as, for example, that the one William thanked is who Sarah is kicking, or that someone is kicking everything that thanked it.

A central assumption of the present study is that progressive forms of the verb, 'think', have a relational reading. Perhaps it will be granted that there is a certain reading of these forms upon which any of the following can be interpreted:

- (1) There's something I was just thinking, but now I've forgotten what it was.
- (2) You are thinking what I'm thinking.
- (3) Someone else was thinking that, too.

And if, on this reading, the appearance of referential terms figuring in complement position in (2) and (3), and the appearance of a quantifier binding that position in (1), are to be taken at face-value, as I think they are, then we will have it that the reading in question is a relational one.

I noted at the beginning, that a natural way to account for the truth of claims made by use of sentences similar to (1) - (3) is to accept that there are thoughts. It seems to me that the assumption that 'is thinking' has a relational reading is at the heart of such an account. In what follows, I shall commonly use sentences of the form

t is thinking t'

where t and t' are terms (variable or constant) in providing formulations of claims about persons thinking things.

## 1.2 Objects of Thought, So-called

In philosophical discussions, the phrase, 'object of thought' is sometimes used as a technical term for thoughts. Why use a technical term when a word in ordinary language seems suited? After all, 'thought' is a perfectly familiar common noun that we apparently do use to refer to just the right sort of thing: presumably, when we speak of what a person is thinking we are speaking of the thought he is having--the thought is what he is thinking; when we say that something just occurred to a person we are saying that she just had a thought--the thought is what just occurred to her, and when we say of two people that the same thing crossed their minds or dawned on them, this means (more or less) that they had the same thought--the thought is what crossed their minds, what dawned on them.

The problem with 'thought' is that in its ordinary usage, it is ambiguous in at least a couple of ways: sometimes it is used to stand for items of the relevant sort, the sort of thing a person can be said to be thinking; but sometimes the term is used instead to refer to events of thinking, instances of activity that consist of particular people doing some thinking. Frege was careful to point out that when he used the term ('gedanke') he was not using it to apply to such mental phenomena. He argued that the items to which he did mean to apply the term are things that may be said to be common to many particular events of thinking, whereas no event of thinking is itself, in any recognizable sense, common to various particular events of thinking.<sup>4</sup> By using the technical expression, 'object of thought', the idea is to make it clear that the intended reference is to the item that is being thought, rather than to any particular event that consists of some person thinking that item.

'Object of thought' is a reasonable choice of phrase for the entities in question. 'thought' is commonly used as a singular term to denote the relationship a person has to a thing in virtue of which he or she may be said to be thinking the thing. And it is customary to refer to the items in the range of a relation as "objects" of that relation. In light of these facts of usage, the proposal to use 'object of thought' as a common noun for the relevant things seems quite natural. Nevertheless, I think it might

prove misleading in the present study to adopt this use. Shortly, I will give some indication of why I think so, but first, I wish to discuss some background concepts that will be important in several connections as we go along.

### 1.3 Events

I take as basic and familiar the notion of an event. No particular theory of events is presumed in what follows, and I would expect (and hope) that any central claims I shall make involving talk of events could be accommodated by various, current theories. However, I am operating here with a certain informal conception, and I should discuss some of its features that I'll be taking for granted.

Events may be said to take place, happen or occur. 'Take place', 'happen' and 'occur' are all synonyms according to my usage. I distinguish the notion of an event's occurrence from that of its existence. Some events are not occurring at this moment: Caesar's conquering Gaulle, Oswald's firing a gun at Kennedy. This means, it seems to me, that there in fact exist such events. The existence of an event, then, does not entail its present occurrence; I assume this much. Are there events that have never occurred, aren't occurring now, and never will occur? I am inclined to think so. Are there also events whose occurrence is a mere metaphysical possibility, perhaps even some whose occurrence is metaphysically impossible?

Although the notion of event is central to this study, addressing these questions would require far more of a theory of events than I need, or am prepared to adopt.

I suppose that any event may be thought of, loosely, as a particular instance of activity, that the event may be said to consist of this activity. I also suppose that any given event involves one or more constituents: things that are essential participants in the activity of which the event consists. Further, I suppose that there are different roles that may be occupied by the constituents of an event, including the roles of subject and object. The idea of these two roles comes roughly to this: when an event occurs, a subject of the event is any constituent that initiates or performs the activity; an object of the event is a constituent that is subjected to, or bears the brunt of the activity--a constituent on which the activity is directed.

There are some clear examples of events in which constituents may be seen to occupy these roles of subject and object: if I kicked a certain football yesterday, then there is an event of kicking having me and that football as constituents--an event that occurred yesterday--and, in the relevant sense, I am the subject of that event, and the football is at least one of its objects. It seems clear that any event of kicking will have one of its constituents

serving in the role of subject and at least one of its constituents serving in the role of object.

Actually, this claim requires some qualification. We may correctly describe a situation as being one, for example, in which a mother pulled her child, kicking and screaming, away from the TV, even though there isn't anything that the child is kicking. In such a situation, we could say, an event of kicking occurred that involves no constituent as object. But the verb 'kick' has both a transitive and an intransitive entry in the dictionary. So I take it there are two corresponding senses of the verb. In the first sense, if we cite a fellow, Jones, in response to the question, "Who was doing the kicking?" and our citation is correct, then it follows that there was a thing such that Jones was responsible for kicking it. In the intransitive sense, to cite a person for having done the kicking does not imply that there was anything he or she was kicking. Accordingly, talk of "events of kicking" will be ambiguous. In one sense, the phrase applies to events that do, in general, involve objects; in the other sense, the phrase does not have this application.

Some events do not involve subjects: in the collision of two rocks in a landslide, for example, neither rock is in any sense responsible for the activity of which the event consists; neither one initiated the collision. In this case, there are only objects of the event. For our present concerns, though, it is important to note that some events



lack objects. Events of persons dancing, smiling, running or walking, for example, seem not to involve any constituents other than their subjects; they lack constituents that are in any way the brunt of the activity involved; hence such events do not, in the relevant sense, have objects.

Before proceeding, let me express one caveat about the notion of constituency at issue. Above I described the constituents of an event as things that are essential participants of the activity of which the event consists. And I characterized the role of object as that occupied by the constituents that are, in a certain sense, the brunt of this activity. This description and characterization presuppose that for any event there is some unique bit of activity of which that event consists. I assume this to be correct. But for any given event, ordinary language may permit many ways of describing this single bit of activity.

Some such ways of describing the activity of which an event consists may involve locutions of the form

e is an event of t's  $\emptyset$ -ing

for some possessive form of a singular term as substituent for ' t's ', and appropriate gerund substituent for ' $\emptyset$ -ing'. In some such descriptions there may be singular terms figuring in the gerund substituent, and in some such cases, it may seem very much as if the thing denoted by the

singular term should be counted as a brunt of the instance of activity being described. It will be tempting then, concerning such a description, to suppose that the referent of the singular term in question is a constituent of the event being described, in particular that it is the object of that event. But this temptation should be resisted. It may be correct, accurate and fairly clear to describe an event as one of a person  $\phi$ -ing some object  $x$ , though it is not the case that  $x$  is a constituent of the event in question--even if, roughly speaking, the gerund,  $\phi$ -ing, certainly does make it "sound" as if  $x$  is the brunt of the activity being described, and hence an object of the event. Maybe the following example will illustrate the point.

Suppose that my only chore for the day was to kick a certain football (readers are welcome to devise a story on their own in which I do indeed have such an activity as a chore). Suppose, too, that I did my chore, kicking the football at some point in the day. So there was this event that occurred that we may describe as an event of my kicking that football. But ordinary parlance also allows us to describe this event as one of my dispatching my sole chore for the day. To describe the event this way seems to me to be accurate and tolerably clear, yet it should not be inferred from this description that the event in question is one having some item denoted by "my sole chore for the day" as its object. There may be a unique object of this event, but presumably it is the football I kicked. Whatever it is

that is denoted by "my sole chore for the day" with respect to the envisioned context, it is hardly plausible to suppose that it is the football I kicked. Then it is hardly plausible to claim that whatever is denoted by "my sole chore for the day" when I describe that event as an event of my dispatching my sole chore for the day, is an object--or any other constituent--of the event in question.

Let me summarize this caveat, loosely, by saying that although I will sometimes describe an event, according to ordinary usage, as one of  $x$ 's  $\emptyset$ -ing  $y$ , for given  $x$ ,  $\emptyset$  and  $y$ , it should not be supposed, from any such description, that the  $y$  in question is an object, or any other essential participant of the activity of which the event being described consists. It will be worthwhile keeping this caveat in mind in discussions to follow.

#### 1.4 Reservations Concerning 'object of thought'

Having said this much about the nature of events, we may return to consider my reservations concerning use of the phrase, 'object of thought'. The problem is that there is this technical sense, discussed just above, in which I will be speaking of items as "objects of events", characterizing them as playing a certain role, among other constituents, in the events in question. Now on the standard usage cited earlier, 'object of thought' applies to items of the sort that persons can be said to be thinking. So in adopting

that usage here, I'd risk conveying the idea that I take items of that sort to occupy the role of object in events of thinking, that they have a role in events of thinking akin, in relevant respects, to that of footballs in certain events of kicking. But I do not accept the view that the things persons are thinking, if they are the subjects of occurring events of thinking, are literally objects of those very events, in the sense of 'object' discussed just above.

It might seem counterintuitive not to accept this view. "After all," one might say, "if an event of kicking is such that a football is the item being kicked--what is kicked--when that event occurs, then the football is the object of that event of kicking." Can't the same be said, mutatis mutandis, for events of thinking and so-called objects of thought? Since 'object of thought' is intended to apply to items that are being thought--what subjects are thinking--when events of thinking occur, can't we infer that these things called objects of thought are, in the relevant sense, objects of events of thinking? I think not.

Perhaps one would make such an inference because one accepts the following:

- (\*) where  $\emptyset$ -ing is the present participle of an event verb, t and t' are terms, and [is  $\emptyset$ -ing] has a relational reading, then on that reading, from [t is  $\emptyset$ -ing t'], infer [t' is an object of an event of  $\emptyset$ -ing].

But I am inclined to believe that this rule is fallacious.

To explain why, consider how we talk about dances, when we use the transitive reading of the verb 'dance'.

If the terms 'the Twist' and 'the Charleston' are referring terms, as they occur in such sentences as

John is dancing the Twist,

Sarah is dancing the Charleston,

and if quantification is involved, as it appears to be, in the claims we express by such sentences as these:

John is dancing something none of us have ever seen before,

Everything John was dancing the other night Sarah had taught him

and if, moreover, there is a single reading of 'is dancing' admissible for all of these sentences, then the verb, 'is dancing' has a relational reading. I do not have an argument that the conditions of these "ifs" are met, but I believe that they are, and consequently, I take it that the progressive forms of the verb, 'dance', have at least one relational reading.

Nevertheless, I suggested above that events of dancing are examples of events that do not, or at least do not clearly, involve any constituents in the role of object. But if such events do not have objects, then the things we refer to when we speak of what persons are dancing--the dances denoted by 'the Twist', 'the Charleston', etc.--cannot be objects of the reported events. Moreover, even if

there are objects involved in any events of dancing reported when someone is said to be dancing the Twist or the Charleston, or what have you, it seems implausible to hold that the dances we are speaking of are themselves any such putative, further constituents of those events--that these dances are themselves, in addition to the dancers, in some sense participants in the activity of which such events consist. (Though ordinary usage would certainly allow us to describe such events as events "of" persons doing the Twist or the Charleston.) Rather, I think it more plausible to see dances as types or manners of dancing--things that may be said to be exemplified by the reported events. I would be inclined to deny that such a thing--the sort of thing having various particular events as examples--is itself a constituent of any of the events that are its examples; and if the type or manner is not a constituent of its instances, it is not an object of those instances either.

Consequently, I am inclined to deny that 'the Twist', 'the Charleston', etc., when they figure as complements of 'is dancing', refer to objects of the reported events of dancing. So it appears to me that there will be pairs satisfying

x is dancing y,

whose second members do not satisfy

y is an object of an event of dancing

If this is right, then not all inferences sanctioned by (\*) are valid; the rule is fallacious.

My view is that our talk of what a person is thinking is, in this respect, more like our talk of what a person is dancing, and that when we refer to what a person is thinking, or more colloquially, to what occurred to a person, or crossed a person's mind, or dawned on a person, the items we thus refer to are types of the events reported, not objects of those events. This idea--that there is such a similarity between, on one hand, the example of our talk of what a person is dancing and, on the other hand, talk of what a person is thinking--underlies the view on the nature of thoughts that I shall be aiming to develop in the course of the present study. I've raised the matter at this point only to guard against a certain confusion: given the use I am adopting for the term 'object'--to apply to items occupying a certain role among constituents of events--since I reject the view that what we are thinking when we are thinking things are objects of those events of thinking, it could prove misleading to employ the phrase, 'object of thought', for the items at issue.

Instead, it seems to me that we can make do with the familiar common noun, 'thought'. What of the ambiguity attaching to the ordinary usage of this term? Well, I cited two uses earlier. One ordinary use is that on which the term applies to the items of the sort we are thinking when

we may correctly be said to be thinking things--what is being thought. The other use is that on which 'thought' serves as a common noun standing for the events of thinking themselves, instances of activity consisting of particular persons doing some thinking. One way we can avoid this ambiguity is to accept the stipulation that the word 'thought' be used in the first way hereafter. That is how I shall proceed here. And hereafter, when I wish to refer, rather, to events of thinking, I'll just use 'event of thinking', or sometimes, too, I'll use the gerund, 'thinking', as a common noun applying to such events.

Let me stress that I am not claiming that anyone has suffered any confusion either resulting from, or resulting in the use of "object of thought" to stand for thoughts. For reasons mentioned earlier, this use of the phrase seems quite natural. My claim is only that in the context of the present study, the phrase is better left unemployed.

### 1.5 A Criterion for Thoughts

I do not have a definition to offer for the usage of 'thought' adopted here. There is however a mark of thoughthood suggested in the preceding discussion, a criterion employed more or less explicitly since the outset, that can be formulated:

(T1) Necessarily, for any x, if it is possible that someone is thinking x, then x is a thought.<sup>5</sup>



As I see it, (T1) expresses an analytic criterion: it is part of the very concept of thought that if a thing could be something someone is thinking, it is a thought. Others who countenance thoughts may not see (T1) as expressing an analytic truth, but I think it would be generally agreed that there is at least some sense of 'is thinking' in which it is correct to say that as a matter of necessity, anything a person could possibly be thinking is a thought. Moreover, I think it would be agreed by virtually all who countenance thoughts that the criterion of thoughthood expressed by (T1) is in fact exemplified by a vast number of things; only thoughts of a rather exceptional variety (see remarks concerning (D?) just below) are perhaps not included. So the criterion has some force.

Can't the notion of thought be defined along the lines of (T1)? Consider:

(D?)            x is a thought   =df    it is possible that someone  
   is thinking x.

But it may be doubted that for any thought whatsoever, it is possible that the thought be something someone is thinking. One consideration that provides grounds for doubt: maybe there are thoughts so complex or so deep that it would be impossible for anyone to be thinking any of them.

Could there be such thoughts? The question may seem rather insignificant, of no importance to the assessment of

competing accounts of the nature of thoughts. I disagree with this sentiment. Perhaps it is very difficult to determine which side is right on the matter--or perhaps the philosophical concept of thought is vague and it is, in particular, indeterminate whether or not there could be thoughts that no one can be thinking. At any rate, although the (partial) account of thoughts that I shall be proposing in this thesis will not settle these matters, it seems to me that a correct and complete account should get these things right: either determining that there are or at least could be unthinkable thoughts, or that there couldn't be such things, or that it is indeterminate as to whether there could or couldn't be. Since I am not sure about which side is right on these matters, and since I do not consider the matters insignificant, I am going to suspend judgment on (D?). The criterion formulated in (T1) will serve our purposes well enough.

#### 1.6 "In-House" Business

The thesis that there are thoughts is not uncontroversial. It has been questioned, for example, whether there really are any things that we refer to when we speak of what a person is thinking.<sup>6</sup> It might be questioned whether, when apparent referring expressions figure as complements to the verb phrase 'is thinking', or when idioms of quantification appear to govern its complement position, we really are referring to or objectually quantifying over

any things at all. Nevertheless, the view that there are such things as thoughts is a very traditional philosophical perspective, one that I am not aiming to undermine. My project is parochial in this respect. Instead, my aim here will be to question certain aspects of what has come to be a standard conception of thoughts within this traditional perspective, and to offer a viable alternative. The present study, then, may be seen as an attempt to straighten out some "in-house" business that I believe has so far not been adequately addressed, not even by those of us who are "in-house", who accept that there are such things as thoughts.

## NOTES TO CHAPTER 1

1. As samplers, see Frege's discussion in Frege [1956] and [1970], Russell's discussion in Russell [1904] and Moore's discussion of "beliefs" (his term for the items in question) in Moore [1953], p. 62 ff. It should be noted that as early as 1906, Russell had abandoned the view that thinking (or any other attitude) was a relation of persons to "thoughts" (see his [1906]).

2. Indeed the only example I know of is the consideration given by Sosa to a view on thoughts suggested in the writings of Descartes. See Sosa [1967] pp. 58. Richard Montague has proposed a view on the nature of certain entities--reports, sensations, obligations--that resembles the one I propose in Chapter 9, concerning the nature of thoughts. See his "On the Nature of Certain Philosophical Entities" (Montague [1974]).

3. Why not speak of "transitive" rather than "relational" readings? I take the notion of transitive verbs, and of transitive readings of verbs, to be largely syntactic notions. A standard criterion for transitivity is permissibility of passive transformation. I do not assume that this feature implies the semantic characteristics I have posited for relational readings.

4. Frege [1970]. At least this is how I read the argument he gives there, p. 59, to distinguish thoughts (the senses of sentences) from ideas.

5. My choice in formulation here is meant to display a link between the concept of a thought and the concept of a thing's being possibly such that someone is thinking it. On some fairly natural assumptions, however, (T1) and the following simpler formulation are interderivable:

(T1') Necessarily, for any x, if someone is thinking x, then x is a thought.

The added assumptions are needed to get from (T1') to (T1), since the embedded antecedent of (T1') is stronger than that of (T1).

6. See, for example, A.N. Prior in his Objects of Thought (Prior [1971]); cf. Chapter 1, and especially, Chapter 2, pp. 16-21.

## CHAPTER 2

### THE PROPOSITIONAL TRADITION AND AN ALTERNATIVE

In this chapter, I would like to give some provisional idea of the conception of thoughts that I aim to develop in the course of this thesis. I will do this by contrasting that conception with what I consider to be the prevalent, canonical view. I begin by reviewing the latter outlook; then, I will give a brief overview of some distinguishing features of the alternative I intend to develop.

#### 2.1 The Propositional Tradition

There is a received perspective concerning the nature of thoughts that will be the "foil" of this thesis--not an outlook that I wish to refute exactly, but one against which I will promote my own view as a worthy competitor. The outlook has been prevalent long enough that adherence to it may be properly termed a tradition--the "Propositional Tradition" as I shall call it. In the present section, I shall be discussing various features of this received perspective; I hope it will be evident enough to the reader in the course of this discussion that the Propositional Tradition is indeed a prevalent and long-standing outlook on the nature of thoughts, and that Propositional Traditionalists are not straw men.

There are various points of view encompassed within the Propositional Tradition that differ amongst themselves concerning the exact nature of thoughts. Nevertheless, as camps within this single tradition, they all agree on certain key tenets. In the remainder of this section, I want to draw attention to three such tenets that distinguish the perspective of the Propositional Tradition from the view to be developed in this study.

### 2.1.1 (PT1)

One of these tenets is very straightforward. According to the Propositional Tradition, thoughts are to be identified with propositions. That is,

(PT1)      Necessarily  $\forall x$ (  $x$  is a thought iff  $x$  is a proposition )

I think it would be agreed by most proponents of the tradition that, as a matter of definition, propositions are things that have truth-values. It may be noted, then, that adherence to (PT1) commits most proponents to the view that all thoughts are truth-valued.

The second tenet that I wish to attend to requires a lengthier discussion; it is implied by another thesis that all camps in the Propositional Tradition agree on, a thesis that is commonly put by saying, roughly, that propositions are the "objects" of "propositional attitudes". Let us investigate what this latter thesis comes to.

### 2.1.2 Propositional Attitudes, So-called

I wish to begin by considering briefly what is meant by the phrase "propositional attitude". In this connection, it will be useful to be able to speak of a verb or verb phrase expressing a relation on a reading, subject to the following constraint (here, and in other formulations to follow, I use 'nec' to abbreviate 'necessarily', and I take 'VP', 'r' and 'R' to range over verb phrases, readings and relations, respectively):

(A1)  $\forall \text{VP} \forall r \forall R$  ( if  $r$  is a relational reading of  $\text{VP}$  and  $\text{VP}$  expresses  $R$  on  $r$ , then if  $\text{VP}^{v,v'}$  is interpreted on  $r$ ,  $R$  satisfies the following:

[  $\text{nec}(\forall v \forall v' (v \text{ bears } R \text{ to } v' \text{ iff } \text{VP}^{v,v'})$  ) ]

where  $\text{VP}^{v,v'}$  is the result of placing distinct variables  $v$  and  $v'$ , respectively, in the subject and complement positions of  $\text{VP}$ .

Take the verb 'runs', for example. It has a relational reading (close in meaning to 'directs'). (A1) guarantees that if 'runs' expresses a relation,  $R$ , on this reading, then on that reading it will be correct to say that necessarily one thing bears  $R$  to another iff the one runs the other.

In addition to (A1), I assume:

(A2)  $\forall \text{VP} \forall R \forall R'$  ( if  $\text{VP}$  expresses  $R$  on  $r$ , then  $\forall R'$  ( if  $\text{VP}$  expresses  $R'$  on  $r$ , then  $R' = R$  ) )

That is, only one relation, if any, is expressed by a verb phrase on a given reading.<sup>1</sup>

I will occasionally speak of an open formula expressing a relation on a reading provided that it is obtained from a verb phrase, VP, by placing distinct variables in the subject and complement positions, and VP expresses that relation on that reading.

Some have taken the phrase, "propositional attitude", to apply to verbs or verb phrases, though more typically it is taken to apply to certain relations. In what follows, I adopt the latter usage. There are some fairly clear and uncontroversial examples of relations of the relevant kind. Belief and desire, for instance, are said to be propositional attitudes.

But it is worth considering which relations are intended by the terms 'belief' and 'desire', when it is said that belief and desire are propositional attitudes (and what is said is true). Take the case of belief. What I assume, and what I think is customarily supposed, is that there is a relational reading of the verb, 'believes', on which it expresses the intended relation. And I think it is sufficient to say that the reading in question is that on which we get truths expressed by sentences of the form

t believes that  $\emptyset$

where the substituend for ' $\emptyset$ ' is an indicative sentence.

A similar claim could be made for 'desire': if the term is used as a proper name for a propositional attitude, it denotes a relation expressed by the verb 'desires' on a



certain relational reading, the reading on which true claims are expressed by sentences of the form

t desires that  $\emptyset$

this time with substituends for ' $\emptyset$ ' being sentences whose main verbs are in the subjunctive.

There are other relations commonly taken to be propositional attitudes that we may cite by appeal to the verbs that express them. Common examples of such verbs are ones that, like 'believes' and 'desires', are used to report mental states or events and that take indicative or subjunctive sentential clauses as complements. For instance, the relations expressed on appropriate readings by

'is wishing', 'is pleased', 'knows', 'hopes'

would commonly be counted as propositional attitudes. Most, I think, would also count

'wonders', 'is wondering', 'doubts'

as examples, along with other verbs that take interrogative sentential complements. I shall do so.

I also suppose that on their relational readings, the various forms of the verb 'thinks'--in particular, the progressive forms--all express relations of the type in question.

There are verbs that, on certain relational readings, express what could be termed psychological attitudes and have important logical features in common with the propositional attitude verbs just cited (in particular, the feature of creating intensional contexts in sentences from which they are formed), but which, I assume, would not be counted as expressing propositional attitudes. 'seeks' and 'worships' are cases in point. It may be that these verbs express relations that can be analyzed in terms of propositional attitudes, nevertheless, I shall suppose, the relations they express would not be deemed propositional attitudes themselves.

I do not have an informative set of conditions to offer that fix the precise boundaries of this concept of propositional attitude. I will have to assume that the reader has an acceptable grasp of which relations I mean, perhaps aided by the sampling of verbs expressing them that I have just given. On this count, though, I am not worse than most proponents of the tradition we are reviewing. It is remarkable how often an idea of what is meant by "propositional attitude" is taken to be acceptably conveyed by a short list of verbs that are supposed to express some of the relevant relations (the list followed by an ellipsis or an 'etc.'). Unfortunately, I am not able to do any better. Probably, the reader can supplement the short list I have given by examples of other verbs that would without controversy be held to express relations of the right sort.

I think it is safe to assume that what I have to say about propositional attitudes in what follows may be understood to apply to all such examples.

### 2.1.3 (PT2)

I think it safe to assume that, when it is claimed that propositions are the objects of the propositional attitudes, one thing that is meant is that only propositions are in the ranges of these relations. Thus, for example, in the case of belief, the claim could reasonably be taken to imply:

(1)  $\forall x( \text{if } \exists y( y \text{ believes } x ), \text{ then } x \text{ is a proposition} )$

But this is certainly not all that is intended when it is claimed that propositions are the objects of belief. Certainly, it would be denied that belief is a relation such that although in fact everything in its range is a proposition, one could bear that very relation to trees, cats or lampposts. Rather, when it is said that propositions are the objects of belief, the following stronger claim is intended (here, and in formulations to follow, 'pos' abbreviates 'possibly'):

(2)  $\text{nec } \forall x( \text{if pos } \exists y( y \text{ believes } x ), \text{ then } x \text{ is a proposition} )$

The claim is that as a matter of necessity, only propositions could be in the range of belief.

It is worth noting that a verb may have various relational readings, and express various relations on those readings. This is true in the case of 'believes'; there is a sense of the verb on which a person may be said to believe another person. Does this mean that the thesis expressed in (2) commits its adherents to the view that some people are propositions? That would be a Moorean nightmare!<sup>2</sup> The answer is "no". The reading of 'believes' on which I may correctly be said to believe people is just not the one on which the verb expresses the relation proponents of the Propositional Tradition mean by "belief" when they claim that propositions are its objects.

The claim about belief expressed in (2) can be put in a convenient way if we introduce the notion of the modal range of a relation. Let  $[R(t,t')]$  abbreviate  $[t \text{ bears } R \text{ to } t']$ , for terms  $t$  and  $t'$ ; we adopt:

(D1) the modal range of  $R$  =df  $\{x: \text{pos}(\exists y( R(y,x) ))\}$

Each member of the modal range of a relation is possibly a thing to which something bears that relation. In many cases, the range that a relation actually has will only be a proper subset of its modal range. For example, the modal range of the relation expressed by 'is an offspring of' includes all parents, but includes any two-year-old potential parents as well.

Using this notion of modal range, we can say something equivalent to what is expressed by (2), if we say that

necessarily, propositions make up the modal range of belief. (But the scope of the description "the modal range of belief" should be understood to be as narrow as possible.)

Now I think we may say what is intended when it is said that propositions are the objects of the propositional attitudes. The thesis is captured by the following generalization:

(PT2)  $\forall R( R \text{ is a propositional attitude} \rightarrow$   
 $\text{nec } \forall x( \text{pos}( \exists y R(y,x) ) \rightarrow x \text{ is a proposition} ))$

The thesis entails that for any propositional attitude, R, it would be impossible for anything but thoughts to be in R's modal range. (PT2) is the second key tenet of the Propositional Tradition distinguishing it from the alternative I sketch below.

#### 2.1.4 A Point of Terminology: "Intentional Attitudes"

I doubt that it would be held within the Propositional Tradition that (PT2) is true as a consequence of the definition of 'propositional attitude'. I think proponents would allow that we can agree with them on which relations are to be referred to as "propositional attitudes", and yet coherently reject their view as to the make-up of the modal ranges of those relations. A denial of (PT2) would be claimed false, but not incoherent. Then perhaps it can be agreed that the term "propositional attitude" is somewhat theory-laden. Since the theory with which it is laden is

one that will be in dispute in what follows, I think it will prove best to adopt some term that is neutral with respect to the contending theories in this study.

From here on, I propose to refer to relations of the sort in question as "intentional attitudes" (or occasionally just "attitudes", if it is clear from the context of discussion that intentional attitudes are in question). I think that appeal to the terms 'intentional' and 'intentionality' has been common enough in the literature, in application to matters pertaining to the so-called propositional attitudes, that my choice of phrase here is not unreasonable. The phrase 'intentional attitude', itself, has already been employed by Chisholm in what would seem to be the use I am proposing (see, for example Chisholm [1981], p.13 ff).

At any rate, it will be important to bear in mind that 'intentional attitude' is posited here simply as a theory-neutral stand-in for 'propositional attitude'. The two terms should be understood to have the same application. Accordingly, although in other contexts our phrase may be assigned a different usage, on its present usage it does not apply, in particular, to the relations expressed by 'seeks' or 'worships', even if these are to be in some way analyzed in terms of intentional attitudes. Nor shall it apply to the relation expressed by 'desires' that may be said to relate us to consumer products; nor to the relation expressed by 'believes' that may be said to relate one

person to another. These too, perhaps, can be analyzed in terms of relations to which 'intentional attitude' does apply, but they are not themselves examples of such relations.

#### 2.1.5 (PT3)

There is a further tenet distinguishing the outlook of the Propositional Tradition from the one I shall be proposing that is not implied by the claims we have formulated so far. This third tenet is concerned specifically with the attitudes expressed by 'believes', 'desires' and 'wonders' (let us call the latter attitude 'wondering'):

(PT3)  $\forall R$  ( if R is an intentional attitude, then  
 i)  $\text{nec } \forall x( \text{pos}( \exists y R(y,x) ) \rightarrow \text{pos}( \exists y( y \text{ believes } x ) ) )$   
 ii)  $\text{nec } \forall x( \text{pos}( \exists y R(y,x) ) \rightarrow \text{pos}( \exists y( y \text{ desires } x ) ) )$   
 iii)  $\text{nec } \forall x( \text{pos}( \exists y R(y,x) ) \rightarrow \text{pos}( \exists y( y \text{ wonders } x ) ) )$

Alternately, the claim could be put by saying that belief, desire and wondering are indiscriminate with respect to their modal ranges: necessarily, if an item is included in the modal range of any other attitude at all, you will find it in the modal range of each of these three.

From (PT3) and (A1) we can derive the following equivalences:<sup>3</sup>

(3)  $\text{nec } \forall x( \text{pos}( \exists y( y \text{ believes } x ) ) \text{ iff } \text{pos}( \exists y( y \text{ desires } x ) ) )$

(4)  $\text{nec } \forall x( \text{pos}( \exists y( y \text{ desires } x ) ) \text{ iff } \text{pos}( \exists y( y \text{ wonders } x ) ) )$

From (3) and (4), in turn, it follows that necessarily the modal ranges of belief, desire and wondering coincide. Consequently, anything at all that can be believed is also a thing that could be desired, and a thing that could be something someone wonders as well. This result would be widely accepted without a moment's hesitation within the Propositional Tradition.

Now let us turn to consider some main features of an alternative to this received perspective.

## 2.2 An Alternative Conception

I wish to begin this section by discussing some apparent points of conflict between the Propositional Tradition and the alternative I shall be proposing.

### 2.2.1 A Taxonomy of Thoughts

The alternative is incompatible with the tenets expressed by (PT1) and (PT2), as I read them, and with the tenet expressed by (PT3) as well. Let's consider each case in turn.

According to my view,

(Alt 1) Thoughts come in separate species only one of which includes members that are truth-valued.



But I agree with the Propositional Tradition in understanding 'proposition' to apply to truth-valued thoughts. Consequently (Alt 1) is incompatible with (PT1), as I read it; according to the new conception, not all thoughts are truth-valued, hence not all are propositions.

Depending on your view of what counts as a species, you might accept (Alt 1) with equanimity, if you think there are any truth-value-less thoughts at all: there's the truth-valued species, you might say, and then there's the non-truth-valued species. But as I see things, truth-value-lessness doesn't determine a species. The species of thought that I count are distinguished from one another, rather, by the intentional attitudes whose modal ranges they include.

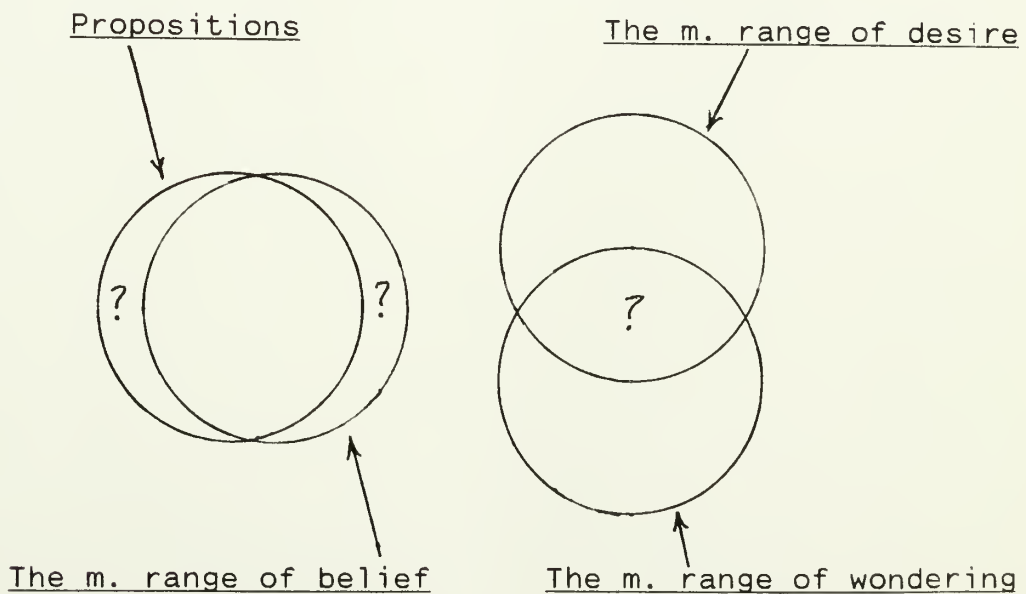
(Alt 1) does not require that any attitudes have modal ranges that fall outside of the truth-valued species of thought. Consequently, (Alt 1) is compatible with the tenet expressed by (PT2), as I interpret it. I agree that with respect to very many familiar attitudes, it is necessarily the case that their modal ranges contain exclusively truth-valued thoughts. Belief is perhaps an example, though I have some qualms. Knowledge would seem to be a clear case (by 'knowledge' I mean the intentional attitude expressed by 'knows' on the reading yielding true claims expressed by sentences in which the verb takes indicative sentential

complements). However, it is a further contention of the new view that

(Alt 2) Some attitudes are necessarily such that their modal ranges are included in the non-truth-valued species.

(Alt 2) is incompatible with the thesis expressed by (PT2) (as I read the latter).

In fact, the new conception holds that certain quite familiar attitudes have modal ranges that exclude propositions. Desire is an example, or so I claim. I am also inclined to hold that the attitude of wondering has a non-propositional modal range that falls within a species of thought other than that of desire. Assuming that the modal range of belief includes at least some propositions--that some truth-valued thoughts are at least possibly believed--we have the following picture:



The contention that wondering and desire have modal ranges comprising distinct species is not a firm commitment of the conception I am proposing. Also, the diagram may suggest, but the view does not require that the modal range of belief is disjoint from that of desire. Some intentional attitudes have modal ranges that overlap more than one of the species of thought, and perhaps belief is one of these. The view will require, however, that neither the modal range of wondering nor that of desire coincide with that of belief. Consequently the present view is incompatible with the tenet expressed by (PT3), for this tenet entails the claim that the modal ranges of belief, desire, and wondering coincide.

### 2.2.2 The Nature of the Dispute

In the preceding section, I spoke of (PT1) – (PT3) as tenets "distinguishing" the Propositional Tradition's conception from the one that I shall propose. Strictly speaking, this may not be quite right. Let me explain why.

In Chapter 1, I took

(T1)  $\text{nec } \forall x( \text{pos } \exists y( y \text{ is thinking } x ) \rightarrow x \text{ is a thought } )$

to formulate what I claimed to be an analytic criterion of thoughthood. My principal goal in Chapter 4 will be to isolate one particular reading of the verb, 'is thinking', displayed in that verb's ordinary usage. I shall contend that if our understanding of (T1) involves this reading, then the concept of thought conforming to the criterion

expressed by (T1), so understood, will be a concept whose features motivate the outlook on thoughts that I am going to propose. Further, as I shall argue, if we understand 'proposition' to apply to the truth-valued items in the modal range of the relation expressed by 'is thinking' on this reading, then we have grounds for rejecting the tenets formulated, on that understanding, by (PT1) and (PT2).

There are several places where a Propositional Traditionalist might part company with me in these matters. Let "Pete" name some arbitrary Propositional Traditionalist. Is it the case that the tenets that Pete expresses with (PT1) and (PT2) distinguish his conception of thoughts from the one I'm proposing? Well, that depends; the issue is somewhat complicated. The matter hinges on whether Pete's understanding of 'proposition' is the same, or at least necessarily coextensive with the one I derive from the conception of thought to be developed in the course of this study. For I assume that Pete and I could agree, at least for the sake of argument, on the letter of:

(D2)     x is a proposition =df   i) x is truth-valued;  
  ii) x is a thought.

But though we might agree on this formulation, it remains open whether we would interpret the second clause of the right side the same way, or at least in such ways that necessarily equivalent conditions are expressed. At the heart of this question, in turn, is the issue of whether

Pete grants (T1), and whether we understand the occurrence of 'is thinking' in that formulation according to the same reading, or at least readings on which 'is thinking' expresses necessarily coextensive relations, or not. If, after all, Pete and I mean different things by 'proposition', then perhaps the view I propose does not conflict with the tenets Pete expresses by (PT1) and (PT2).

It will become clear, I think, that even if we disagree in our conception of 'proposition', and even if, consequently, the view that I propose is compatible with the tenets expressed by (PT1) and (PT2), on Pete's reading of them, there will still be substantial disagreement between me and Pete on other related fronts.

### 2.2.3 A Cartesian Precedent?

There is a passage in the Meditations where Descartes espouses what seems to be a view of thoughts akin to the one I am proposing. The passage occurs in the third Meditations:

considerations of order appear to dictate that I now classify my thoughts into definite kinds, and ask which of them can properly be said to be the bearers of truth and falsity. Some of my thoughts are as it were the images of things and to these alone is the title "idea" properly applied...Other thoughts have various additional forms: thus when I will, or am afraid, or affirm, or deny, there is always a particular thing which I take as the object of my thought, but my thought includes something more than the likeness of that thing. Some thoughts in this category are called volitions...while others are called judgements.<sup>4</sup>

Descartes goes on to claim that only judgments, not ideas or volitions, can properly be said to be bearers of truth and falsity.

I think a natural interpretation of these remarks would have it that Descartes' view is quite like the one I have suggested (apart from his counting "images of things" as thoughts--I shall set aside the question of what his concept of idea comes to). It would not be far-fetched to suppose that what Descartes meant by "judgment" and "volition" are distinct types of thoughts whose instances are to be found, respectively, in the modal ranges of belief and desire. Then Descartes' contention that truth-value is displayed by the former and not the latter would be one with which my view is in agreement.

Indeed, I think it is tempting to see Descartes' view as conflicting with the Propositional Tradition on just the same counts as does mine: contra (PT1), not all thoughts are propositions (if we take propositions to be truth-valued thoughts); contra (PT2), not all intentional attitudes have propositions in their modal ranges (if we suppose Descartes' volitions to be in the modal ranges of any attitudes--of desire, for example); contra (PT3), the modal ranges of belief, desire and wondering do not coincide, since those of belief and desire do not coincide (if we assume that volitions exhaust the modal range of desire but not that of belief).

There is a problem of interpretation, though, confronting the idea that Descartes' conception of thoughts really resembles the one I will propose.

At the beginning of Chapter 1, I mentioned a common usage of the word 'thought' on which the term stands, not for thoughts, but rather for events of thinking. Nothing in what Descartes says in the passage quoted above rules out that he is speaking of items of this second sort--of mental events of a particular variety--and claiming of these, that they come in species. Nothing in this passage rules out that he is claiming of two particular sorts of events--the instances of one denoted by the noun 'judgment', the other's instances denoted by 'volition'--that events of the former sort, and not of the latter, may be said to be true or false. For the Latin noun 'cogitatio' is ambiguous in the two ways we have noted for the English common noun 'thought'. Hence there is no guarantee, none to be discerned from the passage quoted above, that when Descartes used 'cogitationes' he meant things of the sort I have stipulated that we shall mean here by 'thoughts'.

However, Descartes did not confine himself to a simple taxonomy of the things to which he applied the term "cogitatio". He also suggested a view as to their nature, a view concerning the sort of things he took thoughts to be. According to Descartes, thoughts are "modes of thinking substances", by which I take him to have meant properties of thinkers:

Thought and extension may also be taken as modes of a substance, in so far as one and the same mind is capable of having many different thoughts; and one and the same body, with its quantity unchanged, may be extended in many different ways (for example, at one moment it may be greater in length and smaller in breadth or depth, and a little later, by contrast, it may be greater in breadth and smaller in length).<sup>5</sup>

As I read this passage, a view on the nature of thoughts is suggested that is in certain important respects like the one I shall be proposing. What should be noted for present purposes is that Descartes is evidently concerned here with items that could be said to be had in common by various thinkers. He doesn't say this, but in drawing this analogy between thoughts that a mind may have, and ways that a body may be extended, he does seem to suggest it. Provided Descartes would have allowed that different bodies may be said to be extended in the same ways, presumably he would also have held that different minds could be said to have the same thoughts. This suggests to me that Descartes was using 'cogitationes' to stand for things of the same sort we mean here by 'thoughts'. Then if Descartes intended 'cogitationes' in the same way in both of the passages quoted above, there would be some reason, after all, to think that his conception of thoughts was a precedent for the one that I will be proposing--not only because the two conceptions involve roughly similar taxonomies, but also because, it would appear, we have the same genus of thing in mind to which we are attributing these taxonomies.



I would very much like to think that the conception of thoughts that I shall be proposing is a Cartesian one. Unfortunately, I have been unable to find very many passages besides the two just quoted where Descartes explicitly discusses his view of "thoughts". There is consequently not much basis for attributing to him anything akin to the view I shall be proposing. The nature of those items Descartes referred to when he used the word 'cogitatio' as a common noun and the distinction of whatever notions might be expressed by the term, so used, seem not to have been topics that he chose to attend to in his written work.

#### 2.2.4 Four Central Roles for Thoughts

To conclude this chapter, I would like to mention four roles that thoughts are standardly assumed to play, roles that ought to be accommodated, I believe, by any acceptable account of the nature of thoughts. It is an important feature of the new conception of thoughts developed here that one may consistently adopt it without relinquishing the view that thoughts do serve these four standard roles.

Consider

(5)  $\forall R( R \text{ is an intentional attitude} \rightarrow$   
 $\text{nec } \forall x( \text{pos}( \exists y R(y,x) ) \rightarrow x \text{ is a thought} ))$

(5) is an implication of the first two tenets of the Propositional Tradition, (PT1) and (PT2); consequently, the thesis it formulates is a commitment of the Propositional

Tradition. But although I reject the claims expressed by (PT1) and (PT2) (as I read them), the alternative conception of thoughts that I shall propose is compatible with the claim formulated by (5); the claim is one that I accept.

(5) captures what I shall refer to as the "intentional role" that thoughts are standardly supposed to serve: that as a matter of necessity, the modal ranges of all the attitudes are made up exclusively of thoughts; put roughly:

1. The Intentional Role  
Thoughts are the "objects" of intentional attitudes.

In addition to this intentional role, thoughts are standardly assumed to be items to which logical concepts are applicable. For example, it is assumed that thoughts may be said to be necessary or contingent, to be incompatible with or to entail one another, to be the conjunctions, disjunctions or generalizations of other thoughts. Thus:

2. The Logical Role  
Thoughts exemplify logical properties, and are terms of logical relations and operations.

A third role that thoughts are taken to serve has to do with their relationship to language. It is assumed that there is an important connection between thoughts and the use of sentences in language, a connection in virtue of which we manage to communicate our beliefs, desires, wishes, questions and other concerns about the world to one another. Ideas along these lines have been put in various ways, but

as a provisional stand-in, I shall simply say:

3. The Linguistic Role  
Sentences express thoughts.

Finally, it is standardly supposed that many semantic properties of and relations among sentences can be accounted for by appeal to corresponding properties of and relations among the thoughts that those sentences express. An example here would be the idea that an ascription of truth or falsity to a sentence may be understood in terms of the truth or falsity of the thought that sentence expresses. A similar account is standardly assumed for various semantic relations that hold among sentences. Consistency, implication, and contradictoriness are examples. In each case, it would be maintained, there is a relationship among thoughts by means of which we may account for the relevant semantic relationship attributable to sentences. Finally, then:

4. The Semantic Role  
Semantic properties of and relations among sentences can be explained by appeal to corresponding properties of and relations among thoughts.

I hope to give evidence in the course of this thesis that the conception of thoughts developed here accommodates each of the four roles just cited. I take as a starting point the view that thoughts do serve each of these roles; it is an important constraint on my project that the

conception of thoughts that I develop in the present study be compatible with this starting assumption.

There are various features of thoughts required by these roles that I assume to be familiar to the reader, and that I have already been taking for granted. In the next two chapters, I propose to devote some attention to the intentional role, and in Chapter 5 I shall focus on the linguistic role, for these two roles--1 and 3--will be especially important in the arguments I shall propose that are designed to show that the new conception is incompatible with the key tenets of the Propositional Tradition.

## NOTES TO CHAPTER 2

1. Strictly speaking, this notion of a verb or verb phrase expressing a relation must be understood to be relative not only to readings but to contexts, since verbs and verb phrases may be indexicals. For discussion of the relevant notions of indexicality and context, see Chapter 5, sections 5.2.2 and 5.2.3.

2. Moore is said once to have had a nightmare in which he couldn't distinguish propositions from tables. See Cartwright [1962], p. 51, and Bergmann [1960], p. 3. Bergmann attributes the anecdote to Keynes.

3. The proof requires S5.

4. Haldane and Ross, [1931], p.159 The extent to which English translations of this passage differ is remarkable. I have chosen the Haldane and Ross rendition, since it is most amenable to an interpretation that puts Descartes' view of thoughts close to mine. The greatest discrepancy among the different renditions I've seen lies in the handling of the sentence that Haldane and Ross put as:

For example in willing, fearing, approving, denying, though I always perceive something as the subject of the action of my mind, yet by this action I always add something else to the idea which I have of that thing.

Haldane and Ross note that they have used the French version in obtaining this rendition. They claim it to be "more explicit" than the Latin. Here are two other versions I've seen; the following from Cottingham [1986]; p. 26:

thus when I will, or am afraid, or affirm, or deny, there is always a particular thing which I take as the object of my thought, but my thought includes something more than the likeness of that thing.

and the following from Anscombe and Geach [1971], p.78:

when I will, am afraid, assert, or deny, there is always something that I take as the object of my experience, by my experience comprises more than the likeness of the thing in question...

A notable difference is that Haldane and Ross have 'subject' (of the action of my mind') where both Cottingham et al. and Anscombe and Geach have 'object' ('of my thought' in

Cottingham et al., 'of my experience' in Anscombe and Geach). Talk of "object of my thought" in the version of Cottingham et al. may suggest the idea that Descartes is here speaking of what he is thinking, and saying that something more than that is "included" in his thought (in the event of his thinking?). Haldane and Ross's use of 'subject' promotes the idea that Descartes is speaking, not of what he is thinking, but rather of what he is thinking about--the subject of his thought, what his thought concerns--and saying that what he is thinking adds something more to it. This is the idea that resembles my view.

A long time ago, Fred Feldman suggested to me that the conception of thoughts I am proposing was "Cartesian". At the time, I took his suggestion to be merely: that the idea that "thinking" applies to a broad range of mental activities, including more than occurrent believing, was an idea advanced by Descartes. I'm afraid that I may not have paid careful enough attention to what Feldman was suggesting. The idea that, apart from having the same views on the nature of thinking, Descartes' conception of thoughts might actually be a precedent to mine in significant respects, did not sink in until much later, when I came across this passage from the Meditations quoted in the essay by Sosa [1967] on the semantics of imperatives.

5. From article 64 of the Principles of Philosophy, in Cottingham [1985], p.215.

## CHAPTER 3

### OCCURRENT ATTITUDES AND THEIR NON-OCCURRENT COUNTERPARTS

In this chapter, I wish to discuss some matters of terminology, and some matters concerning the classification of attitudes, that will be useful in several connections throughout the remainder of the study.

#### 3.1 Occurrent Attitudes

By "occurrent attitude" I shall mean, roughly speaking, any intentional attitude that one bears in virtue of engaging in some breed of mental activity--any attitude such that, for some type of mental event, bearing the attitude just is being the subject of an occurring event of that type. Examples of what I count as occurrent attitudes are the relations expressed (on familiar readings) by the following present progressive forms:

is wishing

is wondering

is thinking

Take the case of 'is wishing' for example. There is at least one reading of this verb on which it expresses an attitude that a person has in virtue of engaging in mental activity of a particular sort. This is reflected in the fact that if I say and am right in saying that a person is

at this very moment wishing that he hadn't put down a deposit on some apartment, then I ascribe a certain attitude to this person which he bears in virtue of being the subject of an occurring mental event, in particular an event of wishing.

By contrast, these verbs (and verb phrase):

believes

knows

loves to hear

though they do express intentional attitudes, do not express what I am calling occurrent attitudes, at least not on any common usage. To say that the poor fellow knows all too well that he put down the deposit on that apartment, is to ascribe to him an attitude which he can have even if there is no mental activity of any sort in which he is presently engaging--perhaps he is in a deep dreamless sleep at the moment--at any rate not any sort of mental activity such that it is in virtue of his engaging in mental activity of that sort that he bears the attitude ascribed.

It would not be correct to assume that occurrent attitudes are simply those expressed by the progressive forms of attitude verbs. In particular, although 'believes' admits a progressive form, it seems to require a non-occurrent reading. Consider the following sentence, which I think is representative:



His testimony was so persuasive that the jurors are believing everything he tells them.

I assume that the most natural interpretation of this sentence is one involving a reading of the progressive on which it does express an intentional attitude. Yet on this interpretation, if the sentence expresses a truth, I would say that it reports a disposition to believe, not an occurring event of any sort. It may be that the jurors are all in a deep and dreamless sleep at the moment, yet still correct to say of them that they have this disposition, that they are believing everything the witness tells them. But then it isn't in virtue of the jurors' now engaging in mental events of any sort that we may ascribe to them the attitude expressed on this reading by the progressive form.<sup>1</sup>

### 3.2 Occurrent Belief

Some occurrent attitudes may be paired with non-occurrent attitudes as counterparts in a certain respect. Here are some examples: the attitude of desire and that of occurrent wishing (the relation expressed by the present progressive form of the verb 'wish') are counterparts of one another in the relevant sense. The attitude of wondering--expressed by the simple present form of the verb 'wonder'--and the attitude of occurrent wondering--expressed by the present progressive form of the verb--are also counterparts in this respect. There is, then, a way in which occurrent

wishing is related to desire and in which occurrent wondering is related to wondering such that in virtue of being related in this way, these pairs of attitudes may be counted as counterparts in the sense in question.

I don't suppose that every non-occurrent attitude has an occurrent attitude as a counterpart. For example, these attitude verbs,

knows

loves to hear

express non-occurrent attitudes for which, I would claim, there are no occurrent counterparts. It is important however, to distinguish the claim, such as I have just made, that there is no occurrent counterpart of a given attitude at all, from the claim that there is no occurrent counterpart that is expressed by any locutions of ordinary discourse.

Consider the case of belief. I noted above that the present progressive of 'believes' does not express an occurrent attitude. Nevertheless, one finds it commonly supposed in the philosophical literature that there is an occurrent attitude related to belief in a way relevantly like that in which occurrent wishing is related to desire, and in which occurrent wondering is related to wondering in virtue of which these latter pairs may be said to be counterparts. "Occurrent belief" is the phrase commonly used to refer to the attitude at issue. I assume that such

an occurrent counterpart of belief exists, yet it is not clear to me that there is any verb or verb phrase in English that expresses it.

There is a class of English ascriptions that serve to report exactly the events that, I think, would be considered to be events of persons bearing this attitude of occurrent belief. The ascriptions in question are those formed from the present progressive of the verb 'think' when it is complemented by a sentential clause got by prefixing the word 'that' to an indicative sentence (from here on I shall refer to such complements as "indicative clauses"). The ascriptions, then, include any of the form

(F1)        t is thinking that  $\emptyset$ ,

where substituends for 't' are appropriate singular terms, and substituends for ' $\emptyset$ ' are indicative sentences.

Consider:

William is thinking that Sarah will not say "yes".

Sarah is thinking that William seems a little nervous.

At least on one familiar reading of the progressive, each of these sentences, if it expresses a truth, reports an event that would be said to be one of a person--William or Sarah--bearing the attitude of occurrent belief to a thing.

Hereafter, I shall use the phrase "occurrent believings" to refer to events of the sort reported by ascriptions that

instantiate (F1), and I shall assume that these events are ones of persons bearing the attitude of occurrent belief.

If one accepts that there is a familiar reading on which instances of (F1), if true, report occurrent believings, then one might be led to suppose that there is after all a verb phrase of English that expresses occurrent belief, namely, the phrase 'is thinking' on this familiar reading in question. I am inclined to think that if any English verb phrase expresses occurrent belief at all, it is this one, on that very reading. Nevertheless, it does not follow from the fact that true instances of (F1) report occurrent believings, that there is any reading of 'is thinking' on which it expresses occurrent belief. I simply do not know whether there is such a reading. Though it won't be settled, we shall consider this matter further in the next chapter.

Since I shall want to appeal to this attitude of occurrent belief in various claims and discussions to follow, and since I am uncertain whether there is any verb already available in English expressing it, I propose to introduce a technical phrase to serve this function. Although the terminology is somewhat cumbersome, from here on I'll use 'occurrently believe' as a verb whose present tense forms shall be understood to express occurrent belief. I shall assume that the verb and its forms admit subject and

complement terms of exactly the same syntactic sorts as do the various forms of the verb 'believes'.

I shall suppose that the present progressive of 'occurently believes' is linked to that of the verb 'think' by the following two constraints:

(A3) For any indicative sentence,  $\emptyset$ , the following expresses a truth:

[  $\text{nec } \forall x( x \text{ is occurently believing that } \emptyset \text{ iff } x \text{ is thinking that } \emptyset )$  ]

and

(A4) What is expressed by an instance of (F1) is true with respect to the same circumstances as the corresponding instance of

(F2)  $t$  is occurently believing that  $\emptyset$

(fixed readings for substituends of 't' and ' $\emptyset$ ').

(A3) tells us, for example, that the following strict conditional is true:

$\text{nec } \forall x( x \text{ is occurently believing that Sarah will not say "yes" iff } x \text{ is thinking that Sarah will not say "yes" } )$

According to (A4), what is expressed by this instance of

(F2):

Sarah is occurently believing that William is nervous

and what is expressed by the following instance of (F1):

Sarah is thinking that William is nervous

are things true relative to precisely the same circumstances.

### 3.3 Characterizing Counterparts

I have assumed that there is an occurrent attitude that is a counterpart of belief, a "counterpart" in the same sense in which occurrent wishing may be said to be an occurrent counterpart of desire, and in which occurrent wondering is a counterpart of the non-occurrent attitude of wondering. What sense of 'counterpart' is in question here? I propose, now, to consider this question somewhat more carefully.

One might suppose that at least some non-occurrent attitudes can be analyzed in terms of dispositions to bear the very occurrent attitudes that I would count as counterparts. In the case of belief, for example, such a proposal would be that to believe a thing is to be disposed to occurrently believe it. Or, in the case of desire: to desire something (where the intentional attitude, and not some other concept of desire, is understood to be at issue) is to be disposed to be wishing it. Then perhaps we could say that a pair of attitudes, one occurrent, one non-occurrent, are counterparts if they are linked by such a dispositional analysis. But there are problems with these analyses.

A matter that some would find problematic in such proposals has to do with the ingredient notion of disposition. It might be claimed that the idea of a person's being disposed to do something is not acceptably clear and that consequently such dispositional accounts of the non-occurrent attitudes are themselves unacceptable. The relevant notion of disposition does admit of some vagueness, but it is not clear to me that it is unacceptable on this count. Is the complaint that, on some occasions, there is no saying whether a person is disposed, in the relevant sense, to occurrently believe something? But this may be so, and yet the proposed analysis entirely proper. For it may be that, on precisely the same occasions, and for similar reasons, there is no saying whether the person believes the thing in question. The proposed analysis, then, might be clear and correct even if it relates two concepts that do not themselves have a perfectly clear application. (On this matter, compare Lewis' discussion, in his [1973], p. 91 ff, of an analogous objection to his treatment of counterfactuals in terms of a concept of relative similarity).

Other objections could be raised, though, to the proposals I made above, even if the involved concept of disposition is granted. Let us suppose that we have an acceptable idea of what it is to be disposed to do something, if not entirely clear-cut and free of vagueness. The general line of account suggested above was this:

- (1)  $\forall R \forall R'$  ( if R is an intentional attitude and R' is the  
 occurrent counterpart of R, then  $\text{nec } \forall x \forall y$  ( R(x,y) iff  
 x is disposed to bear R' to y ) )

The following is a consequence of (1) concerning belief and  
 its occurrent counterpart:

- (2)  $\text{nec } \forall x \forall y$  ( x believes y iff x is disposed to occurrently  
 believe y )

This formulates pretty closely the dispositional proposal  
 for the case of belief cited before. But (2) seems subject  
 to counterexample. Suppose the fellow who knows all too  
 well that he put down the deposit now wishes to avoid facing  
 this unpleasant fact for as long as possible. He decides  
 that he will go to the Bahamas for a month. He resolves not  
 to consider anything having to do with the deposit until his  
 return. Under normal circumstances he is quite good at  
 sticking to his resolve, and we may suppose that the  
 circumstances are, in this respect, normal. This would  
 appear to be a case where a person believes something (he  
 knows it all too well), but is not disposed to occurrently  
 believe anything at all about the deposit. If this is  
 right, then we should reject (2).

Since (2) is a consequence of (1), this example alone  
 suffices to refute (1). But the general problem does not  
 have to do with any peculiarity of belief: consequences of  
 (1) concerning desire and wondering--and the occurrent



attitudes I have cited as their counterparts--would seem to face similar difficulties.

One might suppose we can get around this sort of difficulty in the following way. In the case of our fellow heading to the Bahamas, it could be maintained that although he is not disposed to occurrently believe that he put down the deposit (indeed, he is disposed not to), and will be thus indisposed for at least a month, nevertheless, if, during this month, his busybody accountant were to drop in, and lead him to consider the thought that he put down the deposit, then he would be disposed to occurrently believe it--and probably would occurrently believe it, much to his chagrin. This suggests the following amendment to the general thesis:

(1')  $\forall R \forall R'$  ( if  $R'$  is the occurrent counterpart of an intentional attitude  $R$ , then nec  $\forall x \forall y$  (  $R(x,y)$  iff were  $x$  to consider  $y$ , then  $x$  would be disposed to bear  $R'$  to  $y$  ) )

The idea, in short, is that if a non-occurrent attitude has an occurrent counterpart, the former may be analyzed in terms of a certain conditioned disposition to bear the latter. Employing this idea, one might propose to characterize the relevant counterpart relationship by saying that two attitudes,  $R$  and  $R'$ , are counterparts in the relevant sense just in case  $R$  is non-occurrent,  $R'$  is occurrent, and the pair,  $\langle R, R' \rangle$ , satisfies the main consequent of (1'). That is, we could put:

(D3) R is an occurrent counterpart of R' =df R is  
occurrent; R' is non-occurrent, and nec  $\forall x \forall y (R(x,y)$   
iff were x to consider y, then x would be disposed to  
bear R' to y )

I doubt that this characterization would be considered very appealing. For one thing, I suspect that some would not find the ingredient notion of a person considering a thought to be acceptably clear as it stands. Yet this notion, as it stands, is about as clear as I know how to make it.

Moreover, the subjunctive form that was introduced in (1') adds another parameter of vagueness to what some might have considered an already unacceptable vagueness stemming from the concept of disposition. What's more, even if we give the condition expressed by the definiens a run for its money--I think I have some working grasp of what condition that is--there seem to be problem cases. Here is a case of the sort I have in mind.

Jones has always accepted that a certain footbridge she crosses on her way to town is quite sturdy. For some time, however, she has been undergoing sessions of hypnosis, and at the most recent session, the hypnotist told her--while she was under hypnosis--that whenever she considers whether the footbridge is sturdy, she ought seriously to doubt it. Perhaps he was being a prankster, perhaps he had some serious reason for not wanting her to occurrently believe that the bridge is sturdy. At any rate, he did not explicitly tell her to change her belief about the

sturdiness of the footbridge, nor even merely to suspend judgment on the matter, nor did he suggest that she ought to have doubts on the matter whenever she crosses the bridge. His suggestion was only that from that point on, whenever she does happen to consider the thought that the footbridge is sturdy, she ought then to occurrently doubt it.

It seems to me that the preceding is a description of a possible situation and that we may suppose moreover that in some such situations the doctor's post-hypnotic suggestion has in fact taken hold.

I think that with respect to some such circumstances it would be correct to say that, subsequent to the session in question, Jones persists in the belief that the bridge is sturdy. It might be that she continues to cross the bridge without worry for the rest of her days, provided she has no occasion to consider whether the bridge is sturdy or not. She might even be surprised on an occasion if the bridge wavered as she was crossing it--surprised, in part, because until this occasion, she would have had the belief that the bridge is sturdy. Of course, once she does occurrently doubt that the bridge is sturdy, she may then change her belief. But for the period following her hypnosis up until such time as she has doubts, it seems to me that Jones may correctly be said to persist in the belief that the bridge is sturdy. Nevertheless, since the post-hypnotic suggestion has taken hold, this very period is one during which it is not the case that were she to consider the thought that the

bridge is sturdy, she would be disposed to occurrently believe it. Indeed, were she to consider it, she would straight-away occurrently doubt it. This seems to me to be a tolerably clear counterexample to the proposal in (D3), for I take it that the definition should not lead us to say that belief and occurrent belief are not counterparts.

I do not see any way of amending (D3) that looks at all promising. Perhaps we had better seek some other way to characterize which occurrent/non-occurrent attitude pairs are counterparts in the relevant respect.

It may be noted that in the three cases of counterpart attitudes that have been mentioned above, if a person bears the occurrent attitude towards a thought, then that person also bears the non-occurrent attitude towards it. Take the case of belief: if someone is at this moment occurrently believing, say, that he put down a deposit on his apartment, then it will be correct to say that this person now believes that he has put down the deposit. He may change his mind, and come to doubt whether he did or even to believe that he didn't; it seems, however, that it is a sufficient condition for him to be in a state that we report by saying that he believes that he put down the deposit, that, at the moment, he is occurrently believing that he did so. Similar points hold, mutatis mutandis, for the case of desire and wondering.

I think that a relatively simple and clear way of distinguishing which pairs of attitudes are occurrent/non-occurrent counterparts is suggested in the preceding observations. Consider:

(D4) R is an occurrent counterpart of R' =df R is occurrent; R' is non-occurrent, and  $\neg \forall x \forall y (R(x,y) \text{ only if } R'(x,y))$

The idea, roughly, is that an occurrent counterpart of a non-occurrent attitude, R, is any occurrent attitude that one cannot bear without thereby bearing R.

It may be noted that this proposal does not guarantee that if a non-occurrent attitude has an occurrent counterpart it has only one. In fact I think there will be cases in which an attitude is counted by (D4) as having several occurrent counterparts. The following case is somewhat fanciful, but it may help to convey the point I have in mind.

I am inclined to hold that there are distinct occurrent attitudes expressed by the following two verb phrases: 'is wishing fervently' and 'is wishing passively'. Each of these attitudes, let us call them "fervent wishing" and "passive wishing", is such that one bears it to a thing only if one is wishing that thing. Then we should expect that either one, coupled with the non-occurrent attitude of desire, satisfies the definiens of (D4). From the fact that a person is wishing something fervently, it follows that she is wishing it; then it will follow that it is something that

she wishes. The same goes for passive wishing. But then, since fervent wishing and passive wishing are distinct occurrent attitudes, we have it that there isn't a unique occurrent counterpart, in the present sense, of the attitude of desire.

I do not see that this is a troublesome result; I think there is a useful and intuitive concept of counterpart defined in (D4). Nevertheless, if we attend again to the case of desire, I think that it would be generally held that--however many occurrent attitudes are counterparts of desire according to (D4)--among these counterparts, the occurrent attitude expressed by the present progressive of the verb 'wish', unadorned by adverbs or other modifiers, is distinguished in an important respect. In contrast to "fervent wishing" or "passive wishing", occurrent wishing simpliciter is in some sense the principal counterpart of desire, the other two being counterparts only derivatively, by virtue of being species of this principal one. A similar distinction, I think, should be claimed for occurrent belief among whatever other occurrent attitudes (D4) would count as counterparts of belief. In general, the idea is that any attitude that has an occurrent counterpart distinguished in this way as a principal counterpart, has exactly one counterpart thus distinguished.

I suggest that this notion of an occurrent attitude's being the principal counterpart of a non-occurrent attitude

is captured by the following:

(D5)  $R$  is the principal counterpart of  $R'$  =df  $R$  is an  
occurrent counterpart of  $R'$ , and  $\forall R^*$  ( if  $R^*$  is an  
occurrent counterpart of  $R'$ , then nec  $\forall x \forall y ( R^*(x,y)$   
only if  $R(x,y)$  )

Let us say that one (two-term) relation entails another just  
in case necessarily the one holds of a pair only if the  
other does. Then the idea expressed by (D5) may be put this  
way: an attitude  $R$ , is a principal counterpart of a non-  
occurrent attitude,  $R'$ , just in case  $R$  is an occurrent  
counterpart of  $R'$ , but, moreover, every occurrent  
counterpart of  $R'$  entails  $R$ .

Does (D5) guarantee, as desired, that if an attitude  
has a principal counterpart, it has only one? I am inclined  
to think so, but the following objection might be made in  
the case of belief (similar objections could be made  
concerning desire and wondering). The objector grants us  
that there is a relation expressed by our verb 'occurrently  
believes' which, together with belief, satisfies the  
definiens of (D5). But the objector has us consider the  
following definition:

(D\*)  $x$  is non-seven-ishly believing  $y$  =df  $x \neq 7$ , and  
 $x$  occurrently believes  $y$

The objector now makes the following claims: i) (D\*)  
defines an occurrent attitude, call it "non-7 belief"; ii)  
non-7 belief is distinct from occurrent belief, but iii) it  
is also a counterpart of belief. If all these claims are

correct, then we cannot hold that our relation of occurrent belief is the principal occurrent counterpart of belief, for if there is a relation defined in (D\*), it is one that is necessarily coextensive with occurrent belief; so it will entail belief, and if it is an occurrent attitude, it will be a counterpart of belief; and since it is entailed by occurrent belief, if the latter is a principal counterpart of belief, it will be too.

In response, I would be prepared to grant that there is an intentional attitude that is defined in (D\*), and that this attitude is distinct from occurrent belief (the objection requires, and I am inclined to allow that non-7 belief and occurrent belief are distinct yet necessarily coextensive). However, I am inclined to think that the pair consisting of non-7 belief and non-occurrent belief fails to satisfy the definiens of (D5). For I am inclined to deny that non-7 belief is an occurrent attitude; if it is not an occurrent attitude, then it is not an occurrent counterpart of any attitude, and hence not a principal counterpart of belief.

The intuitive characterization of occurrent attitudes offered at the start was this: an attitude is occurrent if there is some breed of mental event such that in virtue of being the subject of an occurring event of that breed, a person may be said to bear the attitude. When I say "in virtue of" here I do not mean merely that as a matter of



necessity, a person bears the attitude if and only if subject to an occurring event of the breed. I mean that an attitude is occurrent if what it is for a person to bear the attitude, is for that person to be a subject of the relevant breed.

Now the reason I am inclined to deny that non-7 belief is an occurrent attitude, if it is an attitude at all, is that, as far as I can see, there is no breed of mental event such that a person may be said to bear non-7 belief to a thing, in virtue of being a subject of an event of that breed. It is true that there is a type of mental event--in particular, that of occurrent believings--such that as a matter of necessity, one bears non-7 belief iff one is a subject of an occurring event of that type. But this does not suffice. If it is asked: what is it, in virtue of which a person may be said to bear non-7 belief?--if one wishes to understand what it is to bear this attitude--the answer should be that a person bears non-7 belief in virtue of i) being the subject of an occurrent believing and additionally ii) being diverse from 7. Then it is not simply in virtue of being the subject of an occurrent believing that one may be said to bear non-7 belief. Since I cannot see any other breed of mental event that would fill the bill, I am inclined to say that non-7 belief is not itself an occurrent attitude.

In what follows, I shall assume that if an attitude has a principal counterpart, it has only one, and in particular,

I assume that belief, desire and wondering each have principal counterparts, and that these are the occurrent attitudes expressed, respectively, by 'occurrently believes', as I have proposed to use it, and by the present progressive forms of the verbs, 'wish' and 'wonder'.

### 3.4 The Modal Ranges of Principal Counterparts

To conclude this chapter, I would like to mention an assumption I make here concerning the modal ranges of non-occurrent attitudes and their principal counterparts. What I assume is that if an attitude has a principal counterpart, then the attitude and its principal counterpart have the same modal range. A thesis equivalent to this assumption may be formulated:

(A5)  $\forall R \forall R'$  ( if R is the principal counterpart of R',  
then nec  $\forall x$ ( pos  $\exists y$  R(y,x) iff pos  $\exists y$  R'(y,x) ) )

I take it to be a consequence of (A5) that the following expresses a truth concerning the modal ranges of the three pairs of counterparts to which we have been attending:

(A6) Necessarily, for any x,  
i. pos  $\exists y$ ( y is occurrently believing x ) iff  
pos  $\exists y$ ( y believes x )  
ii. pos  $\exists y$ ( y is wishing x ) iff pos  $\exists y$ ( y desires x )  
iii. pos  $\exists y$ ( y is wondering x ) iff  
pos  $\exists y$ ( y wonders x )

In the remainder of this study I shall be concerned primarily with occurrent attitudes and their modal ranges.

But given (A6), conclusions that we shall reach in subsequent chapters concerning the modal ranges of occurrent belief, occurrent wishing and occurrent wondering will be directly relevant to our assessment of the Propositional Tradition, and in particular to our assessment of (PT3), even though that tenet, as it stands, only concerns the non-occurrent attitudes in the counterpart pairs at issue in (A6).

Within the Propositional Tradition, attention has been devoted, for the most part, to non-occurrent attitudes. However, I believe the assumptions formulated by (A5) and (A6) would be agreed to by many proponents of that tradition.

I propose that we turn our attention, now, to some neglected features of an occurrent attitude expressed by our ordinary use of the present progressive of the verb, 'think'--a relation that seems to me to be one that we commonly express when we talk of a person thinking something, or of two persons thinking the same thing.

### NOTES TO CHAPTER 3

1. The following sort of case was brought to my attention by Phillip Bricker. Consider this sentence:

- (a) The judge is believing everything that the prosecutor is telling him.

We can imagine that this is uttered in a situation where the prosecutor has been feeding the judge a pack of lies and half-truths about the defense's handling of the case and the judge is buying each assertion that comes up. Isn't this a case where the verb calls for a reading on which it expresses an occurrent attitude? I think not. I believe that there are at least some possible situations concerning which it would be correct to say of a person that she is believing things she's being told, in the relevant sense of 'is believing', but is not bearing any occurrent attitude.

Let us suppose that a person is not conscious but is in a deep, hypnotic trance. The hypnotist is telling her things, issuing assertions which he intends her to accept, and there is a fancy piece of machinery to which our subject is hooked up that monitors whether she is coming to believe the things the hypnotist is telling her. If we find that she is coming to believe these things, as he asserts them, then it seems to me that we may say, in precisely the same sense called for in (a), that our subject is believing everything the hypnotist is telling her. This, despite the fact that she is in a deep sleep and not engaged in any events that I would count as involving occurrent attitudes. But if this reading of the verb is one on which the relation expressed is possibly such that someone bears it, but is not bearing any occurrent attitude, then the relation expressed on this reading is not an occurrent attitude. This seems to me to be the case with the reading of 'is believing' called for in (a).

Note, however, that this point is compatible with it's being the case both that (a) expresses a truth relative to a situation, and that the judge happens to be bearing some occurrent attitude or other in that situation.



of the verb 'think' are sentential clauses formed by prefixing 'that' to an indicative sentence--"indicative clauses" as I call them. Thus, we noted the construction

(F1) t is thinking that  $\emptyset$

We noted, too, that when ascriptions of this form express truths, they may be understood to report occurrent believings, events of persons bearing the attitude of occurrent belief.

It may also be observed that ascriptions formed by attaching indicative clause complements to the simple present tense, including any instances of

t thinks that  $\emptyset$ ,

serve to report states of belief, and will be equivalent to corresponding instances of

t believes that  $\emptyset$ .

Consider, for example,

William thinks that Sarah won't say "Yes"

William believes that Sarah won't say "Yes"

I think it is clear that these express equivalent things. Moreover, apart from ascriptions involving indicative clauses, there is certainly a natural reading of the b. sentences in the following pairs on which those sentences

express things equivalent to, if not identical to the things expressed by the sentences resulting from replacement of 'think' by 'believe' (the sentences in parentheses):

- a. Jones: Is Sarah going to say "Yes"?
- b. William: I don't think so. (I don't believe so.)
- a. Jones: I'm sure Sarah will say "Yes".
- b. William: That's what you think. (That's what you believe.)

These observations about the simple present tense, and about the present progressive form when it is complemented by an indicative clause, might lead one to suppose that there are just two closely related "doxastic" readings attaching to these two forms of the verb 'think': the simple present applies to states of belief and expresses the attitude of belief; the present progressive applies to occurrent believings and expresses occurrent belief.

There is, however, a common usage on which the progressive form, 'is thinking', applies to a very broad range of mental events, encompassing events of persons bearing various occurrent intentional attitudes, in addition to that of occurrent belief. It seems plain to me that there is a familiar sense in which, if a person is wondering whether something is the case, or wishing that something would be the case--as well as if he is thinking that something is the case--it is correct to say, whichever of these conditions holds, that the person is thinking

something. And if two persons are wondering the same thing, wishing the same thing, or occurrently believing the same thing, whichever the case may be, if it is then asked whether these two people are thinking the same thing, at least one thing we may be asking has "yes" as its correct answer. It may be expected that we proceed to specify what sort of thinking they are engaged in ("they are both wondering whether...", "they are both thinking that...", etc.), but "yes" would be a correct initial response.

There are constructions in English in which 'is thinking' is followed, not by an indicative clause, but rather by a displayed sentence, where the sentence can be of any mood. The following are instances:

- (1) Jones is thinking: *How am I going to get out of here?*
- (2) Jones is thinking (to herself): *Catch the ball, Jones.*

Each of these is perfectly acceptable in ordinary English and each one seems to me to express a perfectly coherent claim, a claim that is true with respect to quite familiar circumstances. (1) serves to report an event of wondering, (2) serves to report an event of wishing, and either will be true if an event of the appropriate sort is in fact taking place. Now concerning these two ascriptions and circumstances relative to which either expresses a truth, if it is asked: "What is Jones thinking?", "Nothing" would



surely be an incorrect response. One might answer with either (1) or (2), or as well with one of these:

Jones is wondering how she is going to get out.

Jones is wishing that she would catch the ball,

the appropriate response depending on which of (1) and (2) is true, but any such circumstances would be ones with respect to which Jones could properly be said to be thinking something; so it seems to me.

There are several colloquial idioms that we sometimes use more or less interchangeably with 'is thinking'. Rather than saying that a person is thinking something we may say (albeit with some variation in meaning) that something has dawned on that person, or is occurring to the person, or is crossing this person's mind. Further evidence for the existence of a reading of 'is thinking' on which it applies to a wide variety of mental events, rather than just to occurrent believings, lies in the fact that these more colloquial verbal forms, too, display a similarly broad application. If a person says:

"Something is occurring to me",

"Something is crossing my mind", or

"Something is dawning on me"

the claim that person expresses may serve to report an event of occurrent belief, but it may, just as well, serve to report an event of wishing, or of wondering. I say

"I am thinking: *how are we going to get our  
money back?*"

You could respond with any of these

"That question is occurring to me, too."

"That question is crossing my mind, too."

"That question is dawning on me, too."

It seems to me that each of these responses would be coherent and that we would both be reporting ourselves to be wondering something, indeed the same thing. Analogous examples suggest that something a person is wishing, also, may be said to occur to the person, to dawn on the person, to be crossing the person's mind.

There is, then, a family of locutions

'x is thinking y',

'y is occurring to x',

'y is crossing x's mind',

'y is dawning on x'

that we employ to express a family of seemingly closely related relations between persons and thoughts. If we claim that one of the verbs of this family, 'x is thinking y', has a generic reading on which it applies to events of a variety of breeds--wishings, wonderings and occurrent believings alike--then we might expect to find such an application

among other verbs in the family; this expectation is confirmed.

The preceding considerations seem to me to afford substantial grounds for allowing that there is at least one reading of the present progressive of the verb, 'think', on which this particular form of the verb applies broadly to mental events of a variety of breeds, events of persons wishing things and wondering things, as well as to those of persons occurrently believing things. From here on, I shall assume that there is such a reading of progressive forms of the verb, 'think', a "generic" reading, as I shall call it.<sup>1</sup>

In the examples considered so far, the ascriptions for which I have claimed that a generic reading is available have principally been ones in which the complement position of the progressive is occupied by a quantifier phrase; I have been considering claims to the effect that a person is thinking something. It is also fairly clear that the same reading of the progressive applies to sentences in which, apparently at least, the complement position of the progressive is instead occupied by referring terms. Thus, if I say

"I am thinking: *how are we going to get our  
money back?*"

you might respond in one of the ways noted above, but you could also say:

I am thinking that, too.

or

Then I am thinking the same thing you are.

Again these responses seem to me to express perfectly coherent claims, and it would appear that the word, 'that', and the phrase, 'the same thing you are', that figure as complements in these sentences refer to a thing that you are thinking, if these responses are true.

If we take the idioms of reference and quantification in these examples at face-value, then we are led to the view that there is a generic reading available for the present progressive that is relational in the sense specified in Chapter 1 (1.1). I mentioned at the end of the first chapter that some would resist such a proposal. But the evidence here that the generic reading of the progressive of 'think' is relational seems to me to be precisely on a par with the intuitive evidence standardly offered in the case of any other readings of forms of the verb 'think', or, for that matter, with such evidence standardly offered in the case of any other verbs of attitude. Take the verb, 'believe' for example. It is standardly observed that we often speak of persons believing things, or of several people believing the same thing, and that we can meaningfully say such things as that everything a certain person believes is false, or crazy, or unwarranted, etc. Then it is noted that such ways of speaking apparently

involve quantification over a complement position. This in turn is taken as prima-facie support for assuming that there is genuine objectual quantification involved in speaking in these ways, and it is taken as well to be sufficient motivation for semantic accounts of how 'believe' functions that accord relational readings to the verb.

It is hard for me to see any motivation, then, for allowing that objectual quantification and genuine reference is involved in all these other cases, while insisting that the apparent quantification and reference is merely apparent when a generic reading of the progressive of 'think' is in question.

In keeping with my starting assumption from the first chapter, I propose, in the present connection, that we allow that a generic reading of the present progressive form of 'think' is available on which this form admits objectual quantification over, and introduction of genuine, referring terms into a complement position. This is to grant that there exists a generic reading of 'is thinking' that is relational.

It has been noted (amply) that there is a reading of the progressive of 'think' on which an ascription of the form

(F1)        t is thinking that  $\emptyset$ ,

serves to report an occurrent believing. It was noted, also, that on this particular reading, any instance of (F1)

and the corresponding instance of

(F2) t is occurrently believing that  $\emptyset$ .

will express equivalent things--given the interpretation for this latter construction proposed in the previous chapter. But if I am right that there is a generic reading on which ascriptions formed from the present progressive of 'think' may apply to events of wishing and wondering, as well as to occurrent believings, then we may expect that it will not in general be the case that an instance of

(F1\*) t is thinking t\*

interpreted on a generic reading, and the corresponding instance of

(F2\*) t is occurrently believing t\*,

will express equivalent things. For example,

(3) Jones is occurrently believing something.

implies but is not implied by

(2') Jones is thinking something.

(2'), but not (3), expresses something true relative to any circumstances in which Jones is wondering something, or wishing something. Or at least, this is so if a generic reading is attached to the occurrence of 'is thinking' in

(2'). So understood, (2') expresses a thing that is implied, for example, by the claim that there is something crossing Jones' mind, or that something is occurring to her. Either claim may be true, whether Jones is occurrently believing anything or not.

In order to place certain features of this concept of generic thinking into sharper focus, I think it may be worthwhile to consider what other forms of the verb, 'think', besides the present progressive, may exhibit a generic reading, and also to consider what other readings, apart from any generic ones, are available for various forms of the verb.

#### 4.2 Transitive and Intransitive Readings

The various forms of the verb, 'think', have transitive and intransitive readings. One common transitive reading is the relational, generic reading of the present progressive discussed above. But intransitive readings are also commonly called for. With each of the following remarks, the most natural interpretation involves an intransitive reading of the relevant form of 'think':

- (4a) We have to be quiet. Jones is thinking.
- (4b) It is not true that we humans are distinguished from all other animals by our ability to think.
- (4c) Max thinks for a moment, then he hastens to the door.
- (4d) We had to think fast; the guard was due to arrive.

In all these various forms, the verb 'think' takes an intransitive reading that appears to be generic. Consider the present progressive as it figures in the second sentence of (4a). I think it is plain that this sentence may well express a truth--Jones may be "deep in thought"--though she is engaged in occurring mental events of any of a variety of sorts: she may be wondering things, wishing things, making decisions, etc. Similar remarks hold for the other forms displayed in (4b) - d). In (4d) for example, the claim expressed by the first sentence could be fairly paraphrased this way: we had to do some thinking fast. As I understand it, such a claim allows that the thinking required of us might include some wishing, some wondering, some deciding, etc. Then the reading at issue is a generic one. I have not been able to find any examples at all suggesting that there are any intransitive readings of forms of the verb 'think' apart from such generic ones. If it is indeed the case that there are only generic intransitive readings, this is a somewhat remarkable fact.

It is worth noting too that all intransitive readings of forms of the verb 'think' appear to be event readings. By an event reading, very roughly, I mean a reading on which the verb applies to events of thinking, or to states that have to do with the occurrence of events of thinking. Some evidence for the idea that all intransitive readings are event readings comes from the following observation. For



any ascription in which a form of 'think', say think\*, occurs, if that occurrence requires an intransitive reading, it appears that we may arrive at a roughly synonymous ascription by replacing that occurrence of think\* with an occurrence of a form of 'do some thinking' where the form of the verb 'do', itself, has the same tense and inflection as think\*. The point is that there is activity in question, some "doing" at issue, when we employ the concept expressed by a form of 'think' on an intransitive reading. We have seen this to be the case just above in connection with (4d); let us consider (4b). With the substitution just proposed we get:

(4b')        It is not true that we humans are distinguished from all other animals by our ability to do some thinking.

I take it that this is fairly close in meaning to (4b). And here the connection with events is manifest. The ability in question is one that consists in our being able to engage in a certain type of activity, that of thinking. Paraphrase along these lines of (4a) and (4c) also yields sentences that express claims having in a similar fashion to do with events of thinking. Moreover, I think that these examples, (4a) - d), are fairly representative of constructions in which forms of the verb 'think' call for intransitive readings.<sup>2</sup>

I wish to turn now to a question concerning the relationship between the intransitive and transitive readings of forms of 'think'. With some verbs, their transitive and intransitive readings are logically related in a way that we shall make explicit, shortly. For the moment, consider the verb 'eat'. In my edition of Webster's, a principal transitive sense of this verb is claimed to be: "to take in through the mouth as food". The principal intransitive sense is: "to take food or a meal". Now it seems to me that if we are allowed just a little leeway in interpreting these entries, instead of taking the proposal for the intransitive at its letter, we could accept in its place: "to take in food or a meal through the mouth as food". If this is acceptable then the concept expressed by 'eat' on its principal intransitive reading is plainly derived from the transitive reading cited above. To eat (v.i.) is just to eat (v.t.) food or a meal. Then we could expect the following inference to be valid (with superscript 'i' or 't' to indicate the intended reading, transitive or intransitive, respectively):

(I)           (5)    x is eating<sup>i</sup>  
                      -----  
                      :: There is something that x is eating<sup>t</sup>.

And indeed on suitable intransitive and transitive readings this inference does seem an acceptable one. Of course it is important to separate the "habitual" intransitive reading available for (5), from the "occurrent" reading on which it

serves to report occurring events of eating. The "habitual" reading is the one called for more evidently by the following

Jones is eating these days; her anorexia seems under control.

But even in this case there is a corresponding habitual transitive, manifest for

Jones is eating things these days; her anorexia seems under control.

Let me use a superscript 'h' to indicate an habitual reading; then the following seems an acceptable inference:

(II)         $x$  is eating<sup>h,i</sup> these days.  
              -----  
              :: There are things that  $x$  is eating<sup>h,t</sup> these days

Let us say that an intransitive reading of a given verb, VP, supports complement quantification for a transitive reading of VP if the two readings are related in such a way as to warrant the introduction of an existential quantifier (with singular or plural inflection) as displayed in inferences (I) and (II). Then we may say that there are at least some intransitive readings available for forms of the verb 'eat' that support complement quantification for certain available transitive readings of those forms. Let me add that I am not claiming that every intransitive reading of a verb that supports complement quantification of

a transitive reading is derivative, got from the transitive reading of the verb in the manner of this intransitive reading of 'eat'.

Not all verbs that admit both transitive and intransitive readings have intransitive readings that support complement quantification for any of their transitive readings. We considered a case in point in Chapter 1. Whatever exactly the relationship may be between the intransitive and transitive readings of 'kick', it does not warrant the following inference:

$$\begin{array}{l} x \text{ is kicking}^i \\ \hline :: \text{There is something that } x \text{ is kicking}^t. \end{array}$$

Timmy may be kicking and screaming as he is dragged from the TV room to his bedroom, even though there isn't anything that he is managing to kick.

Does the intransitive reading of 'think' support complement quantification for the generic, relational reading? In other words, attending to the present progressive, does the following inference hold, if the conclusion is understood according to the relational, generic reading of 'is thinking' noted above:

$$\begin{array}{l} \text{(III)} \quad x \text{ is thinking}^i \\ \hline :: \text{There is something that } x \text{ is thinking}^t. \end{array}$$

Perhaps it will be of interest to consider a case of the sort that inclines me to think that this inference fails.

Suppose that a connoisseur of antique furniture, let us call him, "Max", has been administered a drug which causes him to have extremely real-seeming hallucinations of things he would like to possess. He is staying in a hospital room that in fact has nothing but dull, institutional furnishings, but he is having a very vivid hallucination at the moment and this hallucination is of an ornate, immaculately preserved, 18th-century Chippendale chair sitting in a corner of the room. The corner is, in fact, quite empty. Max stares in amazement; he is thinking: *That is a mint-condition, late 70's Chippendale.* There is nothing else that is crossing his mind at the moment; he isn't engaged in any wondering or wishing, though he might be soon enough. To put it roughly, the complete text of Max's thinking at the moment is reported by the ascription I made just above:

(6) Max is thinking: *That is a mint-condition, late 70's Chippendale.*

I am inclined to say, concerning such cases, that there needn't be anything that Max is occurrently believing. To get an idea why I am so inclined, I invite the reader to consider what proposition it is that Max could be said to be occurrently believing in this case. And keep in mind that there shouldn't be any ad-hoc variation in which proposition we claim Max to be occurrently believing, as we go from this case of hallucination to veridical cases in which there is a

chair that he is looking at, and he's actually managing to think of it that it's a mint-condition Chippendale, though the complete text of what is on Max's mind is still reported by (6). I assume such veridical cases are possible. My inclination is to say that, in contrast to such veridical cases, in the case of hallucination, there needn't be any proposition that Max is occurrently believing.

Isn't he believing the proposition that there is a chair before him, or the proposition that furniture exists? I grant that in such cases, it is most likely that he does believe that there is a chair before him, and that furniture exists. But I would be inclined to deny that it follows, simply from the description of the case as it stands, that either of these propositions--that there is a chair before him or that furniture exists--are ones that he is occurrently believing. What about the proposition that that chair is a mint-condition, late 70's Chippendale? Isn't Max at least occurrently believing it? But which proposition are we supposed to be picking out here? One concerning some chair of which Max is having an hallucination? But in the description of the case, the corner of the room he is attending to is in fact quite bare. Then I would claim that in this case, there's no proposition about any such a chair for Max to occurrently believe.<sup>3</sup>

At any rate, if there are cases meeting the above description in which there isn't any proposition that Max is

occurently believing, then he isn't occurently believing anything. And if this is the case--if he isn't occurently believing anything--then he surely isn't thinking anything. After all, according to the description of the case, he isn't wondering anything, or wishing anything...he is thinking something in this situation only if he is occurently believing something, and in this situation, that condition isn't met; or so I'm inclined to say.

Nevertheless, Max is thinking. He is engaging in some mental activity properly reported by (6), and the activity in question seems to me just as clear a case of thinking as any other mental activity in which one could be engaged. If this is right, then there are circumstances with respect to which Max satisfies the premise of (III) (for 'x'), but with respect to which he does not satisfy the conclusion of (III). So, I am inclined to think that (III) is not valid, and consequently that the intransitive readings available for a given form of the present progressive of 'think' do not support complement quantification for any available transitive readings. But I haven't intended here to give the reader much grounds to share this inclination; I propose to leave it as an open question whether the intransitive reading of the present progressive supports complement quantification for any transitive readings that may be available for this form of the verb.<sup>4</sup>

In Chapter 1, I proposed to use the gerund 'thinking' as a common noun to stand for events of thinking, "instances

of activity involving particular persons doing some thinking". If, in this characterization of the activity in question, 'persons doing some thinking' is understood to mean the same thing as 'persons thinking' on the intransitive reading of the verb--this is how I think it is to be understood in common parlance--then I can continue to abide by my stipulation. And it is worth noting that if what I have said in this section concerning the intransitive reading is correct, then events of occurrent believing, wondering and wishing alike may be counted as examples of what I am referring to as "thinkings".

#### 4.3 Readings Available for Displayed-sentence Ascriptions

Let me use the phrase "displayed-sentence ascription" for any sentence of the form

(F3)        t ...think...:  $\emptyset$

where substituends for 't' are referring terms, substituends for '...think...' are suitably inflected forms of the verb 'think' and where substituends of  $\emptyset$  are sentences (of any mood). It is worth noting that a variety of forms of 'think' may figure in such ascriptions. We have already noted displayed-sentence ascriptions formed with the present progressive; but the main verb may be a progressive of any other tense as well.



The simple present can figure in such ascriptions, too, though as far as I have been able to discern, a certain usage--the so-called "reportive" usage--is required. This reportive usage is one on which the simple present tense of an event verb serves to describe a situation, whether present, past, future, or even hypothetical or fictional, as if it were unfolding before the describer's very eyes--in the manner of a sports-caster describing the unfolding events of, say, a baseball game: "McElroy returns to the mound. He winds up. Wilson raises his bat. The pitch...Wilson swings; he connects...it's a hard line-drive to center field...", etc.

In a similar fashion, we could describe a scene by saying:

Ernie stops in his tracks. He thinks: *How am I going to get out of here?* Suddenly he begins to retrace his steps.

The second sentence in this passage

He thinks: *How am I going to get out of here?*

is an instance of (F3) formed with the simple present. I don't see that there is any way to interpret such a sentence without understanding it on the reportive usage.

It also seems to me that, in general, these displayed-sentence ascriptions require generic readings for whatever forms of the verb 'think' they contain. If we fix appropriate substituends for 't' and '...think...' in (F3),

say  $t^*$  and  $\text{think}^*$ , we will have the schema,

$[t^* \text{ think}^*: \emptyset]$ .

It seems to me that  $\text{think}^*$  will be univocal across all instances of this schema, and yet these instances serve to report events of wondering, wishing and occurrent believing alike (or to report the past or future occurrences of events of these various sorts, depending on the tense of  $\text{think}^*$ ). The sort of event reported will vary depending on what sentence is the substituend for ' $\emptyset$ ' in the instance at hand, but there is, I would claim, no corresponding variance in the reading of  $\text{think}^*$ . Consequently, a generic reading is involved.

But which generic reading? In section 4.1, I attended to a relational, and hence transitive generic reading, but in the previous subsection, we noted that that there are intransitive as well as transitive generic readings available for various forms of 'think'. Is it plain which of these is involved in our interpretation of displayed-sentence ascriptions? Let us consider this matter, briefly.

Perhaps a plausible initial perspective would be the following. In our interpretation of any given displayed-sentence ascription, the substituend of ' $\dots\text{think}\dots$ ' calls for a relational, generic reading, one on which the verb expresses a relation, call it "R". Further, the displayed sentence--the substituend for ' $\emptyset$ '--serves as a referring

term in such ascriptions, designating a certain thought,  $x$ . (One would presumably want to say that the reference of a given substituent for ' $\emptyset$ ' may vary with context of utterance; we may set this point aside for the present.) Then, as this view would have it, if the given instance of (F3) expresses a truth, the thing expressed is true because the referent of the substituent of ' $t$ ' bears  $R$  to  $x$ .

Let us confine our attention to instances of (F3) formed with the present progressive. Points analogous to those I shall make in what follows would hold concerning displayed-sentence ascriptions in which some other form of 'think' figures as main verb. Now, in fact, in the case of any of a large number of present progressive displayed-sentence ascriptions, if a given ascription expresses a truth, the subject of the ascription may properly be said to be thinking something that is indicated in some fashion by the displayed sentence. If the following, for example, expresses a truth

Ernie is thinking: *How am I going to get out of here?*

we would say, I think, that there is a thing indicated by the displayed interrogative, and this thing is something that is crossing Ernie's mind or occurring to him; it is something Ernie is thinking. And in this latter claim--that this thing is something Ernie is thinking--the relational reading of 'is thinking' is surely involved.

Such observations may be thought to lend credence to the general view of displayed-sentence ascriptions cited just above, that a relational reading of the contained form of 'think' is called for, and that the displayed sentence serves as a device of reference, and denotes, if the ascription expresses a truth, an item in the modal range of the relation expressed by the relevant form of 'think' on its relational reading. However, I am inclined to think that this view is mistaken and my reasons for thinking so are connected to considerations canvassed in the preceding section.

Let me continue to attend to the case of displayed-sentence ascriptions formed from the present progressive (3rd person singular). I am inclined to believe that such an ascription,

[t\* is thinking:  $\emptyset$ ]

for suitable t\* and sentence,  $\emptyset$ , may be true and the following true as well:

[There isn't anything that t\* is thinking.]

Recall the case of the hallucinating antique collector discussed before. Such cases suggest that the view outlined just above is incorrect. For I suggested, with respect to the case described, that the sentence:

(6) Max is thinking: *that is a mint-condition, late 70's Chippendale.*

expresses something true in the situation, while the sentence

(8)           There is something that Max is thinking.

does not. Then I am inclined to say that (6) and

(9)           There isn't anything that Max is thinking.

express things that may be true with respect to the same situation. And I take it that if this is the case then, contrary to the view under consideration, (6) may express something true even though there isn't anything to which Max bears the relation expressed by the progressive, on its relational, generic reading.

Let me stress that although I am inclined to think that (6) expresses something compatible with what is expressed by (9), I am not claiming that this has been established; I have left it an open question. Consequently, I do not take these considerations to settle--in the negative--the question of whether (6) has an interpretation involving a relational, generic reading.

However, if it is not the case that (6) has an interpretation involving a relational reading of 'is thinking', and we retain my suggestion above that the reading of 'is thinking' will be univocal throughout displayed-sentence ascriptions in which the present progressive is the main verb, then in general the reading

available for such an ascription will not be a relational one. And I think a similar conclusion would be suggested concerning readings of other forms of 'think' figuring as main verbs in displayed-sentence ascriptions, such as the simple present figuring in (7).

Perhaps a natural view to adopt in response to these considerations is that a given displayed-sentence ascription should be understood to take the intransitive reading of its main verb. The displayed sentence itself, then, could be viewed not as a referring phrase denoting something thought, but rather as an adverbial modifier, its function assimilated to that of the prepositional phrase, 'with great concentration', or the adverb, 'fast', in such ascriptions as

Max is thinking with great concentration

Ernie thinks fast

On this view, we take the occurrence of the present progressive and the simple present figuring in (6) and (7), respectively, to have their intransitive readings, and we take the displayed sentence in either case to indicate, not something the subject is thinking, but rather a way or manner in which he is thinking. Whether this is the correct view to take concerning the reading of the form of 'think' contained in a displayed-sentence ascription, and whether this is the correct view concerning the semantic function of

the displayed-sentence itself, are questions that I am not as yet able to answer.

#### 4.4 Readings Available for Indicative-Clause Ascriptions

Let me use the phrase "indicative-clause ascription" to stand for any ascriptions of the form:

(F4)        t ...think... that  $\emptyset$

where substituends for 't' are referring terms, substituends for '...think...' are suitably inflected forms of the verb 'think' and where substituends for ' $\emptyset$ ' are indicative sentences. What reading of the contained form of 'think' is available or called for in such ascriptions?

##### 4.4.1 The Belief-Relational Account

One might well suppose that with indicative-clause ascriptions, we have the clearest case where forms of the verb, 'think', take doxastic readings. The idea, alluded to at the outset of section 4.1, is that there is a reading of these forms on which they either express occurrent belief or else the non-occurrent attitude of belief, and that instances of (F4) require interpretations that involve this doxastic, relational reading of progressive forms of 'think'. This proposal would account for the fact noted in the preceding chapter that instances of (F1) have an interpretation on which they serve solely to report occurrent believings, for it is just this interpretation, so

the idea goes, that involves a reading of the progressive forms of 'think' on which these forms express occurrent belief. Let me try to convey this idea somewhat more fully.

We may distinguish two types of reading available for forms of the verb, 'think': event readings and state readings. The first type has already been cited in our discussion of intransitive readings--event readings are ones on which the verb applies to events of thinking or to states having essentially to do with the occurrence of such events. (Habitual readings are examples of the latter sort; for instance, "Jones thinks strange things these days" is ambiguous; one interpretation of the sentence involves a state reading, but another available interpretation involves an habitual reading on which the claim expressed is more or less this: it tends to be these days that the things Jones is thinking, when she is thinking things, are strange. With this paraphrase, the concern with events thinking on Jones' part is manifest.) State readings, by contrast, are ones on which a given form of 'think' applies to states, but not states that essentially concern the occurrence of any events of thinking; on these readings forms of the verb are close in meaning to corresponding forms of 'believe'.

As far as I have been able to tell, readings of either type are available for any form of 'think', as it figures in instances of (F4), and as well in other constructions. With the simple present, the most likely interpretation of an



instance of (F4) is one that involves a state reading. Thus

(10) William thinks that Sarah will not say "Yes."

would normally be taken to report a belief that William has. But an event reading is available if we take the sentence on a reportive usage. This interpretation can be elicited by features of the surrounding discourse. So for example, in

William looks up Sarah's phone number. He picks up the phone, and begins to dial. Suddenly, William thinks that Sarah will not say "Yes." He hesitates; puts the phone down resignedly, and begins to pace again.

Here, the occurrence of (10) calls for an interpretation involving an event reading of the simple present. The most likely interpretation is not (merely) that William believes that Sarah will not say "Yes." but that he suddenly has the thought that this is so.<sup>5</sup>

Progressive forms in indicative-clause ascriptions may also take either event or state readings. So far we have concerned ourselves with interpretations of such ascriptions on which they serve to report events. By contrast, consider:

(11) His testimony has been so persuasive that those close to the case are thinking that the jury will acquit him.

Here, the most likely interpretation of the underlined clause is one on which the claim expressed does not entail that those close to the case are engaged in events of

thinking at the moment; on the most natural interpretation of this clause, the claim expressed could be true even if (11) were uttered in the middle of the night, and all concerned were sleeping a deep and dreamless sleep. Rather, on this interpretation, the clause serves to report a state of mind of those close to the case: that these people are all "of a mind" that the person in question will be acquitted.

This state reading for the progressive can be rendered unlikely if we change the sentential context. If the subject phrase is singular, and the indicative-clause ascription at issue is standing alone, it is very difficult to get an interpretation on which the ascription reports a state of belief rather than an event of occurrent believing:

(12)           The defendant is thinking that the jury will  
                  acquit him.

This is not to say that the only interpretation available for (12) is one involving an event reading of 'is thinking', only that an interpretation on which (12) serves to report a state of belief is far less likely here than it is for (11).

I should emphasize that by "event reading", I do not mean solely readings that may be said to apply to presently occurring events. An event reading is likely for the past progressive figuring here:

                  The defendant was thinking that the jury would  
                  acquit him.

though there is a sense in which one might say that this ascription serves to report a state: on one likely interpretation at least, it could be said to report the defendant's being such that at some time in the past he was thinking that the jury would acquit him. I assume that there is such a state. Still, this state is one that the defendant is in now (assuming the ascription expresses a truth), in virtue of the past occurrence of an event of thinking, and the above ascription serves as well to report that event. Accordingly, I would count the reading of 'was thinking' involved as an event reading. Similarly, the main clause underlined here,

The moment court is adjourned, the defendant will be thinking that the jury will acquit him,

on one natural interpretation, could be described as reporting a present state of the defendant, but it is a state that the defendant is in, in virtue of a future occurrence of an event of thinking. The reading of the future progressive involved here is again an event reading.

Now the idea proposed above concerning the interpretation of indicative-clause ascriptions can be expressed more fully. For simplicity, let me restrict attention here to such ascriptions in which the simple present or the present progressive is the main verb; I shall call these "present-tense ascriptions":

### The Belief-Relational Account

- i) In any present-tense ascription, the main verb takes one or the other of two readings: a state reading and an event reading;
- ii) both readings are relational, and
- iii) the main verb expresses belief on the state reading, occurrent belief, on the event reading.

Belief and occurrent belief are counterparts in the sense discussed in Chapter 3. There, we noted that some verbs of attitude are such that their progressive forms, on event readings, express occurrent counterparts (the principal occurrent counterparts) of the attitudes expressed, on state readings, by the simple present forms of those verbs. 'Wish' and 'wonder' were the cases we considered then. From the standpoint of the Belief-Relational account, the verb 'think' is another example. On the event and state reading involved in the most likely interpretations of, say

William is thinking that Sarah will not say "Yes."

William thinks that Sarah will not say "Yes."

(respectively), the present progressive expresses the principal counterpart of the attitude expressed by the simple present form. In this regard, the Belief-Relational account sees the verbs in the preceding two instances of (F4) as related in their behavior in these contexts in a way quite analogous to the way in which the corresponding forms of the verb 'wonder' are related as these figure in pair

William is wondering whether Sarah will say "Yes."

William wonders whether Sarah will say "Yes."

On first pass at least, this view on the relation between event and state readings of the present progressive and simple present (respectively) of the verb 'think' may seem quite plausible.

#### 4.4.2 Reservations Concerning the Belief-Relational Account

Despite its initial plausibility, there are two considerations that lead me to doubt the Belief-Relational account; though I do not say it is plainly mistaken. The two considerations may in fact be closely connected. Let me canvass them first; in the next subsection, I shall suggest the way in which I suspect they may be connected. The first point can be put very briefly; the second consideration is more telling, I think, but requires a lengthier exposition.

1) If there is an event reading that expresses occurrent belief, as proposed by this account, it seems odd that it should appear, as I noted in 4.2, that all intransitive readings available for forms of the verb, 'think' are generic. If the Belief-Relational account were right, one might expect there to be an intransitive reading more closely connected to the purported relational event reading on which the present tense forms of the verb are supposed to express occurrent belief.

2) There is what seems to me a somewhat striking fact about certain sentences obtained from indicative-clause ascriptions by removing their main indicative clauses, and either binding the complement position with quantifiers or introducing expressions of other sorts as complements; the fact in question is not very easily accommodated by the Belief-Relational account.

Let me attend first to cases where we begin with an indicative-clause ascription, and extract its main indicative clause, binding the complement position of the main verb by a preceding quantifier. And for simplicity, let me confine my attention to ascriptions formed with the present progressive. A representative example of the sort of operation in question is displayed in going from (12) to (12a):

(12)       The defendant is thinking that the jury will acquit him.

(12a)       There is something the defendant is thinking.

What is striking is this: in general, it appears that the only event reading available for the main occurrence of the progressive in the resulting ascription will be a generic reading. In the case of (12)/(12a), it seems to me that the latter ascription may be so interpreted that it serves to report an event of wishing or wondering, as well as an event of occurrent believing. If the defendant is wondering at the moment whether the judge will give him a light sentence,

or if he is wishing that the judge would do so, or occurrently believing that the judge will do so, however the case may be, it seems to me that such mental activity is properly reported by (12a). And as long as an event reading for the progressive in (12a) is fixed, so that our interpretation of the ascription is one on which it serves to report some ongoing mental activity (it is hard to get a "state of mind" interpretation in this case anyway; cf. the interpretation of (11) noted above), I cannot detect any such interpretation on which this sentence serves to report exclusively occurrent believings. The only available interpretation seems to be this one on which the sentence serves to report occurrent believings, wishings and wonderings alike. Then I take it that the reading of the main verb involved in this interpretation is the generic reading.

This is striking because the introduction of an existential quantifier would seem to be entirely innocuous; its introduction in (12a), binding the complement position formerly occupied by an indicative clause, ought not eliminate a relational reading available for 'is thinking' as it occurs in (12). We would seem to have a straightforward case of existential generalization--indeed, what is expressed by (12) does entail what is expressed by (12a)--yet the only event reading available for 'is thinking' in (12a), it seems to me, is a generic one.

We find a similar absence of the alleged occurrent belief reading when the complement position of (12) is altered in other, seemingly innocuous ways. Rather than bind the complement position by an antecedent quantifier, we may instead replace the indicative clause with a wide variety of suitable complement phrases--demonstratives, quantifier noun phrases, definite or indefinite descriptions. By and large, the result is the same: we obtain a sentence such that if it is interpreted to report an event, that interpretation would seem to require a generic reading of 'is thinking'.<sup>6</sup>

Consider the following:

(12b) The defendant is thinking something strange.

(12c) The defendant is thinking the same thing you are.

Either of these, it seems to me, may be so interpreted that it serves to report an event of wishing or wondering as well as an event of occurrent believing. If the defendant is wondering at the moment how he's ever going to find a certain pair of polka-dot swimming trunks when he's in jail, and the man knows he is about to be sentenced to death for murder, I think we may properly report his current mental activity by issuing (12b). Perhaps you don't agree that this would be a strange thing for the defendant to be thinking; but that doesn't affect the central point, namely, that the question on his mind, what's occurring to him at the moment, is a thing for him to be thinking, whether its a



strange thing for him to be thinking or not. And if at this very moment the defendant is wishing that the judge would give him a light sentence, and that is what I am wishing at the moment too, then it would be appropriate for you to utter (12c), addressing me. Under the circumstances described, it seems to me that this sentence serves to report, correctly, the mental activity in which this defendant and I are engaged, though it is not fully specific as regards what sort of mental activity we're engaged in.

Moreover, if we attend just to interpretations of these sentences on which they serve to report events, I do not see that anything but a generic reading is available for the contained occurrences of 'is thinking'. For it seems to me that if we interpret (12b) and (12c) to be reporting occurring events at all (as opposed to states of belief, as in the case of (11) considered above), our interpretation will not be one on which these sentences serve exclusively to report events of occurrent believing. Then I take it that a reading of the verb on which it expresses occurrent belief is not involved in this interpretation.

Yet in either case, the replacement of the indicative clause in (12) by the relevant complement seems innocuous: it is hard to see why such replacement should result in a shift in the reading required of 'is thinking', if the reading involved in (12) is itself a relational reading, as the Belief-Relational account suggests.

Perhaps, for contrast, it will be worthwhile to consider some examples involving other verbs where modification of flanking positions can be expected to result in a shift in available readings. There are certainly cases where substitution of one noun phrase for another in the subject or complement position of the main verb of a sentence affects what interpretations are available for the resulting sentence. I have been able to think of three general cases where this phenomenon might be expected to arise:

1) Idioms Some clear examples of this phenomenon are cases where the main verbs figure in idioms. There are interpretations available for sentences of the form

t bought t\*

in which 'the farm' is the substituent for 't\*' that are not available for other instances of this form. Consider

(13a) Maggie bought the farm.

(13b) Maggie bought that red dress.

Here the substitution of the complement 'that red dress' for 'the farm' is not innocuous since the resulting sentence no longer contains the idiomatic expression 'bought the farm'. The idiom functions as an independent lexical item, and is not interpreted by way of any relational reading of the verb 'bought'. On the other hand, (13a) does admit an

interpretation that involves a relational reading of 'bought'; perhaps Maggie bought a dairy farm in Minnesota. But this is the very reading still available--and presumably most likely--for the occurrence of 'bought' in (13b).

2) Grammatical Agreement Hebrew provides another class of cases where substitution in a flanking position of the main verb may be expected to affect what interpretations are available for the resulting sentence. There are certain nouns in Hebrew that, when occurring as subject terms of verbs, require agreement in gender with those verbs. For example, there is a verb that means 'to float' whose feminine simple present inflection, 'tsafa', has the same spelling as the masculine simple past inflection of a verb that means 'to observe' (the pronunciation involved is different, I've been told). Then sentences in which 'tsafa' occurs as main verb may lack an interpretation on which they report present floatings, or they may lack an interpretation on which they report past observings, depending on whether the subject term requires the masculine or feminine inflection.<sup>7</sup> If we substitute the feminine 'sirah' for the masculine 'mashkif' in

(14a) Hamashkif tsafa (The observer observed),

obtaining

(14b) Hasirah tsafa (The ship floats).

we are forced to shift our reading of the main verb. Thus, substitution of a noun phrase of feminine gender for 'mashkif' in (14a) is not innocuous. In this case the shift in available reading is due to a lexical feature of the substituend, and the grammatical rule of Hebrew requiring gender agreement in this case between subject and verb.<sup>8</sup>

3) Semantic Constraints We can find cases in English, I believe, where substitution of one expression for another in the complement position requires a shift in readings of the main verb, and the shift is forced by a semantical feature of the substituend. I am inclined to think that the reading involved when we may correctly say that someone believes a person is different from the reading on which 'believes' expresses the intentional attitude of belief. I assume that the latter is involved in

(15a) Jones believes that the defendant will be acquitted.

So when we proceed from (15a) to

(15b) Jones believes him

a shift in how we read 'believes' seems required. Then replacement of the indicative clause in the first ascription by the personal pronoun, 'him', would not be innocuous; in this case a semantic feature of the substituend--that it is restricted in its denotation to things that are male--would force the shift in readings.<sup>9</sup>

I can think of one other sort of example from English that I think falls under the present class of cases, where semantic constraints determine available readings. Many event verbs have transitive readings on which they express relations between the subjects of the events to which they apply, and things that are not constituents of those events. An example of the sort of reading I have in mind is available for the verb 'hit'. One transitive reading, plainly a relational reading, of this verb is one on which it expresses a relation between things that can be subjects of events of hittings and things that can be objects of such events--physical objects. Let me call this the "corporal" reading of the verb. I believe there is another transitive reading however that is operant when we speak of someone hitting a home run. I take it that 'home run' applies to particular events in baseball games. I am not quite confident that this is the proper classification. At any rate, whatever sort of thing home runs may be, they are not the sort of thing one can be said to hit in the corporal sense, they are not physical objects, they are not spatially extended (though presumably, like events of many sorts, they may be said, at least roughly speaking, to have a spatial location.) Then since what we say when we speak of people hitting home runs is often true, there must be some other sense, besides the corporal one, in which persons may be said to hit things.

It might be suggested that talk of hitting home runs is idiomatic. I think this is not very plausible, for a couple of reasons. First, we may bind the complement position with quantifiers, and the usage is not tongue in cheek. Plainly we may speak of a person hitting several home runs in a given game; we may say that there were some that he hit in the second inning, but that most were hit in the third. We can say that he hit something in the ninth but we can't remember what (was it a home run, a ground-rule double?) All this strikes me as normal usage. By contrast, if I say

There was exactly one farm that Maggie bought (and she bought it two days ago)

and intend by this that Maggie died (two days ago), I am engaging in a play on words; the usage is not standard. Second, there is a class of complements that are intersubstitutable, salva interpretatione: We may speak of a person hitting a line drive, a ground-rule double, etc. There seems to be something that the verb 'hit' commonly means as it figures in any such ascription. This seems to me to suggest that a genuine relational reading is available for the verb in these ascriptions, and that the usage is not idiomatic.

If this is right then we have a fairly clear case where altering the complement will affect the readings available for the verb: a corporal reading is available for 'hit' as it figures in

(16a) Babe Ruth hit it.

but not in

(16b) Babe Ruth hit the last home run of his career.

Thus the substitution of 'the last home run of his career' for 'it' in (16a) is not innocuous. I assume that the shift in interpretation here is due to a semantic constraint tying the readings available for 'hit' in these occurrences to the meanings of terms occupying its complement position.

To sum up, I have considered three sorts of cases where the substitution of one term for another in complement position (or the introduction of a quantifier binding that position) may not be an innocuous operation: cases involving idioms, cases in which there is grammatical agreement between verb and complement, and cases involving semantic constraints. If a verb and complement term figure together as part of an idiom, then it seems likely that no substitution for the complement will be innocuous: with any substitution we lose the idiom. But in some cases involving grammatical agreement and semantic constraints, we can anticipate that the substitution of certain terms into the relevant positions will be innocuous, no matter the prior occupant.

There are dual-gender nouns in Hebrew that can accompany verbs with masculine as well as feminine

inflection. 'shemesh' (Sun) is an example. Substituting this term for either 'mashkif' or 'sirah' in (14a) or b) above does not eliminate the reading originally available for the main verb (But see note 8). Thus,

(14c) Hashemesh tsafa.

is ambiguous; the sentence may be interpreted to mean either that the sun observed, or that the sun floats.

In the case of 'believes', we can replace the complement of either (15a) or b) by the pronoun, 'it', and clearly not rule out the reading called for in the original. If Jones has been consulting an oracle, the following may express a truth,

(15c) Jones believes it

with 'it' denoting the oracle and 'believes' taking the reading it has in (15b). On the other hand, if Jones has just heard that oracles are generally unreliable, again, (15c) may express a truth, this time with 'it' denoting the thing that Jones has just heard about the reliability of oracles, and 'believes' taking its intentional-attitude reading. Thus, 'believes', as it figures in (15c), has either reading available. Substitution of 'it' for either the personal pronoun in (15b) or the indicative clause in (15a) is innocuous: it doesn't rule out any reading available for the sentence prior to substitution. The same



point holds concerning the substitution of 'it' for 'the last home run of his career' in (16b).

Introduction of quantifiers may or may not be innocuous. Binding the complement position of 'believes' in (15a) with the antecedent quantifier 'There is someone' may not be innocuous. It is at least not clear to me that the intentional attitude reading is available for 'believes' as it occurs in

(15d)        There is someone Jones believes

(but see reservations concerning (15b) expressed in Note 9). Binding the complement position of 'hit' by the quantifier, 'There was a home run', won't be innocuous. The occurrence of 'hit' in

(16c)        There was a home run Ruth hit in 1922 that no one will forget.

cannot take the corporal reading.

On the other hand, introducing the quantifier 'There is something' to bind the complement position, either in the case of 'believe' or 'hit', seems pretty clearly innocuous.

(16d)        There was something Ruth hit in the third inning.

is ambiguous. The corporal reading is possible, but I think the "home run" reading is more likely. Was it a home run he hit, or a double, or was it that sacrifice fly?

(15e)        There is something Jones believes.

is ambiguous too. The thing in question satisfying

Jones believes x

may be either the oracle Jones has been consulting, or rather the thing that Jones heard about the reliability of oracles, depending on which reading of 'believe' is at issue.

Now let's return to the matter of readings available for 'is thinking', as that verb figures in (12) and (12a) - c). I shall confine my attention to the case of (12)/(12a). I can see no reason to suppose that introduction of the quantifier, 'there is something', binding the complement position should, in this case, rule out readings available for the main verb, when the introduction of this quantifier in the case of (15e) and (16d) has no such effect. Moreover, it is hard to see what reason could be offered by a proponent of the Belief-Relational account. That account itself proposes a relational reading of the verb as the one involved in the relevant interpretation of (12); this would seem to rule out the possibility that the shift in interpretation arises because the verb is figuring there as part of an idiomatic expression. In contrast with the case of (14a) and b), there are no apparent syntactic constraints that could be expected to require a shift in readings in going from (12) to (12a). And presumably, in contrast with

the case of (15d) or (16c), there are no semantic restrictions accompanying the introduction of the quantifier that could call for a shift in readings. It seems to me that if there were a relational reading involved in our interpretation of (12) on which the progressive expressed occurrent belief, we ought to expect there to be some such reading discernible for (12a), a reading on which we could expect (12a) to assert, in effect, that there is something Jones occurrently believes. Yet no such reading seems available.

Let me summarize the present line of argument against the Belief-Relational account by formulating it with explicit premises and conclusion. Here is an argument:

An Argument Against the Belief-Relational Account

- i) If the Belief-Relational account is correct, then any event reading available for 'is thinking' in (12) is one on which it expresses occurrent belief.
  - ii) There is an event reading available for the occurrence of 'is thinking' in (12)
  - iii) The event readings available for the occurrence of 'is thinking' in (12a) are precisely the event readings available for the verb as it occurs in (12).
  - iv) There is no event reading available for the occurrence of 'is thinking' in (12a) on which it expresses occurrent belief.
- 
- :: v) There is an event reading for 'is thinking' as it occurs in (12) on which it doesn't express occurrent belief
- 
- :: vi) The Belief-Relational account is incorrect.

I am not sure that this argument is successful. I think i) and ii) are clearly true. I am inclined to accept iv) because I cannot myself detect any occurrent belief reading for (12a). Yet I am not certain about this. I am inclined to accept iii)--that the introduction of the quantifier in (12a) does not affect available readings--but again I am not certain of this. Nevertheless, these considerations seem to me to provide at least some reason to question whether the Belief-Relational account of indicative-clause ascriptions is correct.

It may be that both sets of considerations against the Belief-Relational account canvassed in this subsection--the point about intransitive readings that I mentioned briefly at the start, and the present point about lack of any but generic event readings available for (12a) - c)--are consequences of the same general feature of event readings of the verb 'think'. In the following subsection, I shall discuss this possibility.

#### 4.4.3 A Conjecture Concerning Event Readings

If we look beyond indicative-clause ascriptions, we find that interpretations involving event readings of various forms of the verb 'think' are often called for. Contrast the following two sentences containing the simple present form:

(17a) Jones thinks some strange things on occasion.

(17b) Jones thinks some strange things at present.

My impression is that one natural interpretation of (17a) involves an event reading of 'thinks'. On this interpretation, the sentence (if it expresses a truth) reports a fact about thinkings to which Jones is occasionally subject; we are saying, more or less, that Jones engages from time to time in some events of thinking and the things she is thinking at those times are strange. I think it is plain that this event reading is generic. (17a), so understood, will express a truth if Jones occasionally occurrently believes strange things, but it will express a truth as well, on this interpretation, if it has occasionally been the case that Jones is wondering strange things, or wishing strange things.

With (17b), by contrast, such an event reading is difficult. The most natural interpretation of this sentence seems to be one on which what is expressed amounts more or less to: Jones has some strange beliefs at present. As far as I can tell, the only way to get a reading for the verb as it figures in (17b) on which the sentence would report something about events of thinking, in the manner of (17a), is to take the sentence on a reportive usage. But such an interpretation is somewhat hard to get in this case, I think, because of 'at present'; we don't commonly apply this adverb to the simple present on the reportive usage.

This difference between (17a) and b) suggests a general distinction between those cases where forms of 'think' actually take readings on which they express belief, and cases where a generic reading is called for. One might conjecture:

(T\*)        Event readings of forms of the verb 'think' are precisely the generic readings.

If this conjecture is right, it not only accounts for the intuitive difference noted just now between interpretations of (17a) and b), but also explains both sets of considerations advanced above against the Belief-Relational account:

1) If (T\*) is right, we would have a simple explanation for the apparent feature of intransitive readings noted in section 4.2, that all such readings are generic. For as we observed there, all intransitive readings are event readings.

2) If (T\*) is right, and if interpretations of indicative-clause ascriptions involve event readings of progressive forms of the verb, 'think', then those readings will be generic. Then, it is no longer surprising that if we consider sentences obtained from indicative-clause ascriptions by replacing the indicative clauses with certain other complements, we find that, if we fix on interpretations of the sentences involving event readings of

the contained forms of 'think', the involved event readings are generic. For the relevant readings of those forms figuring in the indicative-clause ascriptions themselves are generic.

Since (T\*) entails that there is no event reading of the main verb in a present-tense indicative-clause ascription on which that verb expresses occurrent belief, (T\*) and the Belief-Relational account cannot both be true. I am not convinced that (T\*) is true, but I think that the matters cited above weigh in its favor. I leave the conjecture as an open question.

#### 4.5 Summary of 4.1 - 4.4

I have been concerned with what I am calling "generic" readings of forms of the verb 'think'. Roughly speaking, these are readings on which the verb applies equally to thinkings of various breeds: to wishings, wonderings and occurrent believings alike. Such readings are ubiquitous; they appear to be available for any tense and inflection of the verb. There are intransitive generic readings, and in fact all intransitive readings appear to be generic (4.2). Indeed, there is some reason to believe that all event readings of the verb, in any of its forms, are generic readings (see discussion of (T\*) just above in 4.4.3).

In section 4.1, I was especially concerned to isolate a relational, generic reading available for the present

progressive. I think it is clear that there is such a reading, and there are certain cases where such a reading is clearly available for a given occurrence of the verb. However, it is not entirely clear whether it is available in all constructions in which a present progressive form of 'think' figures as main verb. In particular, it is not clear to me what to say about indicative-clause ascriptions with the progressive. If (T\*) is true, then since such ascriptions certainly do allow event readings, we should have to allow that generic readings are at least available for the verb as it occurs in indicative-clause ascriptions; but I am not sure that (T\*) is correct. However, it is also not at all clear whether there is a relational reading available for the progressive in these ascriptions on which it expresses occurrent belief--contrary to the proposal of the Belief-Relational account proposed in 4.4.1. I remain uncertain whether there is any verb of ordinary discourse that has a reading on which it expresses occurrent belief.

I do not see a way of demonstrating that there is only one relational, generic reading available for the present progressive. I know of no evidence to the contrary, however. In what follows I shall assume that there is only one such reading, and it will be useful to have a phrase with which to refer to the relation expressed by present progressive forms on this reading; I shall call it, "generic thinking".



It will be useful to have a way of making it clear when I intend to express this relation of generic thinking in claims to follow. In the formulation of principles and assumptions, then, and occasionally in informal discussions where the intention may not be clear enough from the context, I shall prefix a superscript 'gen' to the participle, 'thinking', when the relational, generic reading of the progressive is intended. So we shall employ ascriptions of the form

(F5)        t ...<sup>gen</sup>thinking t\*

where '<sup>gen</sup>thinking' is any present progressive form of 'think' with 'gen' attached. I propose to accept instances of (F5) in which the substituends for 't\*' include a wide variety of expressions that normally figure as complements of the progressive of 'think': demonstratives, quantifier phrases, descriptions. Also I shall employ open formulas obtained by putting variables in for 't' and 't\*' in (F5), as well as sentences that result by binding the variables in these positions with appropriate quantifiers.

I propose, however, to avoid instances of (F5) formed with sentential complements. There are two kinds of sentential clauses that may occur as complements of the verb 'think' itself (or of any of its forms). We have already considered cases involving indicative clauses. Interrogative clauses may also figure as complements of the verb in certain forms, e.g.,

We were trying to think whether William should ask Sarah to marry him.

Interrogative clauses seem to be more clearly acceptable as complements of the infinitive. For example, the preceding sentence was counted acceptable by all speakers I've consulted; by contrast, the following

I was thinking whether I should tell William to ask her.

was considered acceptable by some but not all.

I do not know how sentential clauses function when they appear as complements of forms of the verb 'think'. And I am not sure what readings of the verb can be had as it figures in ascriptions in which it has such complements. And I do not know, in particular, whether a relational, generic reading is available for the progressive form of the verb as it occurs in any of these sentential-clause ascriptions. Consequently, I would not have any idea how to interpret instances of

t is <sup>gen</sup>thinking that  $\emptyset$

or

t is <sup>gen</sup>thinking whether  $\emptyset$ ;

whether the corresponding instances of

t is thinking that  $\emptyset$

and

t is thinking whether  $\emptyset$

express coherent claims or not.

On occasion, I will employ other tenses and inflections of the verb 'think' with the 'gen' prefix. We can say that a person was <sup>gen</sup>thinking the same thing I was the other day; that the person will be <sup>gen</sup>thinking some intriguing things in the future. On the reportive usage, we can say that a person suddenly stops, <sup>gen</sup>thinks something, and starts to run away from us. I assume that the concepts expressed by such ascriptions can be grasped well enough if one has a grasp of the concept of generic thinking that is expressed by the present progressive forms. In what follows, whenever a form of the verb 'think' occurs without the 'gen' prefix, and the verb is not accompanied by any sentential complement, it will be safe to assume that I intend to express the generic relation.

#### 4.6 The Modal Range of Generic Thinking

Considerations advanced in 4.1 suggest that the relation of generic thinking has the following property: whether a person is occurrently believing something, wishing something or wondering something, either way, the person is <sup>gen</sup>thinking something. That is:

- (18) Necessarily, for any  $x$ ,
- i)  $\exists y( x \text{ is occurrently believing } y ) \rightarrow \exists z( x \text{ is } \text{gen}^{\text{thinking}} z )$
  - ii)  $\exists y( x \text{ is wishing } y ) \rightarrow \exists z( x \text{ is } \text{gen}^{\text{thinking}} z )$
  - iii)  $\exists y( x \text{ is wondering } y ) \rightarrow \exists z( x \text{ is } \text{gen}^{\text{thinking}} z )$

(18) proposes a particular link relating each of the modal ranges of occurrent belief, wishing and occurrent wondering to that of generic thinking. But there is a stronger claim to be made, in the case of each of these three occurrent attitudes, concerning the relationship of its modal range to that of generic thinking. In 4.6.1, I shall pursue this matter; in 4.6.2, I shall consider the question of what other intentional attitudes besides these three have modal ranges that are related, in the way to be discussed, to the modal range of generic thinking.

#### 4.6.1 (A7) and the Modal Range of Generic Thinking

For simplicity, when I wish to speak of the attitudes of occurrent belief, wishing and occurrent wondering jointly, let me refer to them as "the three attitudes". Note that it will suffice for the truth of (18) that there be some distinguished item,  $x$ , such that whenever we bear one of the three attitudes to anything at all, it is  $x$  that we are  $\text{gen}^{\text{thinking}}$  and no other. But positing such a distinguished item does not conform to certain intuitions we have concerning the relation of generic thinking. Surely, if I am occurrently believing something and you are occurrently believing something else, then on the generic reading, it will be correct to say that there are distinct

things that we are thinking. A similar claim may be made with respect to our wishing or wondering distinct things. So we have:

(19) For any one of the three attitudes, R,  
 $\text{nec}(\forall x \forall y ( \text{if } \exists z \exists z' ( R(x,z); R(y,z'), \text{ and } z \neq z' ),$   
 then  $\exists z \exists z' ( x \text{ is } \text{gen}^{\text{th}} \text{thinking } z; y \text{ is } \text{gen}^{\text{th}} \text{thinking } z',$   
 and  $z \neq z' ))$ )

(19) rules out the possibility of some single distinguished "object" of thought that we are thinking whenever we bear one of the three attitudes towards things. However, it doesn't rule out the possibility that there are precisely two such "objects" of generic thinking. I think that a stronger assumption than (19) is warranted by intuitions concerning the "objects" of these three attitudes and of generic thinking.

Take the case of occurrent wondering. Suppose that at this moment, William is wondering whether Sarah will say "yes". Then there is something he is thinking. But I think we may also say that at least one thing William is thinking is something any others would be thinking too, provided they too are wondering whether Sarah will say "yes" (same Sarah in mind). If this is right, it suggests that for anything, x, that a person can be wondering, there's a thing that can be  $\text{gen}^{\text{th}}$ thought, y, such that whenever a person is wondering x, that person is  $\text{gen}^{\text{th}}$ thinking y. I think that the same claims, mutatis mutandis, are warranted concerning occurrent

belief and wishing, and the relationship of the modal ranges of these two attitudes to that of generic thinking.

What seems to be required, minimally, is an assumption along these lines: for each one of the three attitudes, R, there is a one-one correspondence, f, between R's modal range and the modal range of generic thinking such that necessarily, a person bears R to a thing x only if the thing to which f maps x is something that person is <sup>gen</sup>thinking:

- (20)  $\forall R$  ( if R is one of the three attitudes, then  $\exists f$ :
- i)  $f: m\text{-range}(R) \text{ one-one} \rightarrow m\text{-range}(\text{generic thinking})$
  - ii)  $\text{nec } \forall x \forall y ( R(y,x) \rightarrow y \text{ is } \text{gen}^{\text{thinking}} f(x) )$

There are several questions that can be stated clearly by appeal to such presumed one-one correspondences, questions that are left unsettled by (20) itself. Consider occurrent belief; (20) guarantees that there is a function mapping each thing in the modal range of occurrent belief to a (perhaps proper) subset, call it "OB", of the modal range of generic thinking. Moreover, concerning this set, OB, (20) implies:

- (21)  $\forall x$  ( if  $\text{pos } \exists z$  ( z is occurrently believing x ), then  $\exists y$  ( y is in OB, and  $\text{nec } \forall z$  ( if z is occurrently believing x, then z is <sup>gen</sup>thinking y ) )

But this fact about OB doesn't settle certain questions. We may still ask: i) are the members of OB themselves in the modal ranges of any occurrent attitudes? Perhaps they comprise some breed of thing disjoint from any kind to which we may bear intentional attitudes. Does OB overlap with the

modal range of occurrent belief itself? Perhaps, OB just is the modal range of occurrent belief. Each of these possibilities is compatible with (21), but not settled by it.

The questions just raised may be put, somewhat more loosely, in the following way: if (20) is correct, then whenever we occurrently believe things, there is an associated set of things we are thinking, in the generic sense. What is the connection between the things occurrently believed and these associated things that we are <sup>gen</sup>thinking? Are the latter items "objects" of attitudes at all? Maybe the things we may be said to be thinking comprise some entirely separate category of item, disjoint from the modal ranges of any intentional attitude. On the other hand, perhaps the things we are <sup>gen</sup>thinking when we occurrently believe things are themselves "objects" of attitudes; indeed perhaps they are the very things that we are then occurrently believing. None of these suggestions is ruled out by any of (18) - (20).

One way to settle these matters is to assume that for each of the three attitudes, R, the one-one correspondence satisfying the two clauses of the main consequent of (20) is an identity function. This is in fact a consequence of the main assumption I propose to make here. On the view I adopt, the "objects" of the three attitudes are themselves "objects" of generic thinking. In the remainder of this

study, I shall be developing a position that, as a starting point, views the relation of generic thinking as an intentional attitude, albeit a generic one. And moreover, on the view to be adopted here, it will in general be the case that when one may be said to be thinking something in virtue of bearing one of the three attitudes to a thing,  $x$ , one thing one will then be thinking is  $x$  itself.

Accepting (20) does not force this perspective on us. Just above, I noted several alternatives to this view that one might adopt instead. One might deny that generic thinking is an intentional attitude at all--it is compatible with (20) that the modal range of generic thinking is disjoint from that of any intentional attitude. Nevertheless it seems to me intuitively plausible to assume that the things we may be said to be thinking, in virtue of occurrently believing, wishing or wondering things, are just those things occurrently believed, wished or wondered themselves.

So I propose to adopt the following:

- (A7)         $\text{nec } \forall x \text{ nec } \forall y:$   
 i)     $x$  is occurrently believing  $y \rightarrow x$  is <sup>gen</sup>thinking  $y$   
 ii)    $x$  is wishing  $y \rightarrow x$  is <sup>gen</sup>thinking  $y$ , and  
 iii)  $x$  is wondering  $y \rightarrow x$  is <sup>gen</sup>thinking  $y$

Roughly, (A7) tells us that any of the three attitudes is such that necessarily, if a person bears it to a thing, then that thing is something the person may be said to be thinking, in the generic sense. This assumption implies (20), and consequently (18) and (19) as well.



#### 4.6.2 Which Attitudes Are Species of Generic Thinking?

We may say that an attitude requires generic thinking according to the following:

$$(D6) \quad R \text{ requires } R^* \text{ =df } \text{nec } \forall x ( \exists y R(x,y) \rightarrow \exists y' R^*(x,y') )$$

(Here and in the following definition, 'R' and 'R\*' are to be taken as ranging over relations generally.) Roughly, an attitude may be said to require generic thinking if a person can't bear the attitude to a thing without thinking something. An attitude's requiring generic thinking should be distinguished from its being such that whenever one bears it to a thing, one is thinking that very thing. The latter property is entailed by an attitude's being a species of generic thinking, which may be understood according to:

$$(D7) \quad R \text{ is a species of } R^* \text{ =df } \text{nec } \forall x \forall y: \\ \text{i) } R(x,y) \rightarrow R^*(x,y), \\ \text{and ii) } R^* \text{ does not require } R.$$

Specification is stronger than requirement: the claim that an attitude is a species of generic thinking, implies but is not implied by the claim that it requires generic thinking. The thesis we started with in this section, the one expressed by (18), implies merely that the three attitudes require generic thinking. The assumption captured in (A7), however, together with the claim, which is surely correct, that generic thinking does not in turn require any of the

three attitudes, implies that each of the three attitudes are species of generic thinking.

Are there other intentional attitudes for which there is reason to claim that they are species of generic thinking? I think it is clear that many familiar, non-occurrent attitudes will not have this property. For example, consider belief, desire and wondering. Each of these is such that one may bear it at a time without being engaged in any mental activity at the time. I may correctly be said to believe that the defendant will be acquitted, even though I am in a deep and dreamless sleep; William may correctly be said to wonder whether Sarah will say "yes" (on a state reading of the present tense), even though he is in a deep and dreamless sleep. Examples concerning many other non-occurrent attitudes will go the same way. But a person is thinking something only if he or she is engaged in some mental activity. So one can, for example, believe something without thinking anything; plainly then, one can believe something without thinking that very thing.

I know of no familiar occurrent attitude that is required by generic thinking, except for generic thinking itself. Then can we say that all occurrent attitudes apart from generic thinking are species of generic thinking?

Perhaps we may accept not only (A7) but:

(A?) For any occurrent attitude, R,  $\forall x \forall y ( R(x,y) \rightarrow x \text{ is } \text{gen}^{\text{thinking}} y )$

Then we could say at least that any occurrent attitude not required by generic thinking is a species of generic thinking. But I think it may be doubted whether (A?) is correct.

I am inclined to think that there is an occurrent attitude expressed by the present progressive of 'doubts': when we say that a person is doubting something (and an event reading is intended), I think we imply that the person is engaged in an instance of a certain type of mental activity, that of doubting. But I also suppose that the sort of thing to which one may be said to bear this occurrent attitude of doubting are by and large the things that can be occurrently believed. The modal ranges of occurrent belief and occurrent doubting surely overlap to a great extent; I am inclined to think that they coincide.

But now suppose I am doubting something,  $x$ , that you are occurrently believing. Should we say that  $x$  is something I am thinking? Well, (A7) implies that  $x$  is something you are thinking, for according to (A7), occurrent belief is a species of generic thinking. So if we do suppose that  $x$  is something that I am thinking, we should have to say that there is a thing, namely  $x$ , that both of us are thinking. More generally, we would have to say that anytime there is something that one person is doubting and that another is occurrently believing, there is something the two people are thinking in common. But this seems counterintuitive.

Keep in mind that we are dealing here with a certain familiar concept of thinking--a concept involved when we say, for example, that two people are thinking the same thing, and mean more or less that the two persons are having the same thought, that the same thing is occurring to them, or crossing their minds. If I am doubting something that you are occurrently believing, it is surely not plausible to say that it follows that we are thinking the same thing.

These considerations lead me to reject (A?). I do not deny that it is possible for one person to be doubting what another is occurrently believing, while the two are thinking something in common. Here is a case: you are occurrently believing that William will be happy and that Sarah will say "yes". I am occurrently believing that William will be happy, but doubting that Sarah will say "yes". This seems to me to be a possible situation. Then there is something that I am occurrently believing and that you are doubting--that Sarah will say "yes"--but at the same time it is true that there is something that both of us are thinking in common, a thought that both of us are having: that William will be happy. But in this case the common thought is not the thing that you are occurrently believing and that I am occurrently doubting.

I also do not deny that if a person is doubting a thing, it follows that there is something that person is thinking. Suppose again that I am doubting that Sarah will

say "yes". I am inclined to think that there will be something I am thinking; perhaps it is what I would express by uttering:

Maybe Sarah won't say "yes" after all.

I am inclined to think that the occurrent attitude of doubting does require generic thinking. Indeed I am inclined to think that all occurrent attitudes require generic thinking. But it is the property of being a species of generic thinking that is my concern at present. I doubt that all occurrent attitudes have this property.

I have not been able to discover any informative criterion that distinguishes those attitudes that are species of generic thinking from those that are not. So I do not see any significant way of generalizing (A7). However, in the remainder of this study, I shall be primarily concerned with these three attitudes of occurrent believing, wishing and occurrent wondering. So, the claim formulated in (A7) will suffice here.

Although I think that (A7) is a very natural assumption, it is a substantial one. It will prove crucial to the arguments I present in Chapter 8, by means of which I shall seek to join issue with the Propositional Tradition.



person is having a thought. What I claim to be an analytic truth is that anything a person may be said to be thinking-- in this sense--is a thought. I believe it is clear that an event reading of 'is thinking' is involved here.

We have considered grounds for doubting whether there is any event reading available for progressive forms of 'think', apart from its generic reading (see 4.4.4). Of course this is not to say that one could not devise some such other reading, by a definition, and propose to interpret (T1) by means of it. I would have to see a proposed definition, before I could have anything to say about whatever thesis would be expressed by (T1) on the resulting interpretation.

The criterion I accept may be unambiguously formulated as follows:

$$\text{nec } \forall x( \text{pos } \exists y( y \text{ is } \text{gen}^{\text{thinking}} x ) \rightarrow x \text{ is a thought } )$$

Hereafter, I shall call the criterion thus expressed, "Thesis 1".

Thesis 1 and (A7) jointly imply

- (23) Necessarily, for any x,
- i)  $\text{pos } \exists y( y \text{ is occurrently believing } x ) \rightarrow x \text{ is a thought,}$
  - ii)  $\text{pos } \exists y( y \text{ is wishing } x ) \rightarrow x \text{ is a thought,}$
  - iii)  $\text{pos } \exists y( y \text{ is wondering } x ) \rightarrow x \text{ is a thought.}$

And from (23), together with the assumption,

- (A6) Necessarily, for any x,  
 i)  $\text{pos } \exists y( y \text{ is occurrently believing } x )$  iff  
 $\text{pos } \exists y( y \text{ believes } x )$   
 ii)  $\text{pos } \exists y( y \text{ is wishing } x )$  iff  $\text{pos } \exists y( y \text{ desires } x )$   
 iii)  $\text{pos } \exists y( y \text{ is wondering } x )$  iff  
 $\text{pos } \exists y( y \text{ wonders } x )$

(proposed in Chapter 3, section 3.4, p.20), we get:

- (24) Necessarily, for any x,  
 i)  $\text{pos } \exists y( y \text{ believes } x ) \rightarrow x$  is a thought,  
 ii)  $\text{pos } \exists y( y \text{ wishes } x ) \rightarrow x$  is a thought,  
 iii)  $\text{pos } \exists y( y \text{ wonders } x ) \rightarrow x$  is a thought.

At the end of Chapter 1, I considered four roles that are part of the standard philosophical conception of thought. One of these I called "the intentional role": the idea that thoughts are the "objects" of the intentional attitudes. This was formulated as follows (the sentence number is changed to accord with numbering of the present chapter):

- (25)  $\forall R( \text{if } R \text{ is an intentional attitude, then}$   
 $\text{nec } \forall x( \text{pos}( \exists y R(y,x) ) \rightarrow x \text{ is a thought } ) )$

(25) implies both (23) and (24). Since this "intentional role" expressed by (25) is part of the guiding conception of thoughts with which this study began, I consider the fact that (23) and (24) are consequences of Thesis 1 (together with (A6) and (A7)) something to be welcomed.

Before proceeding to the next chapter, let me bring this very, very long chapter to a close by digressing just briefly to discuss a matter that I find somewhat puzzling; the matter has to do with the circumstances under which a person should be said to be thinking more than one thought.



#### 4.8 How Many Thoughts Are You Thinking?

It is traditionally assumed that thoughts can be terms of standard logical operations; in particular, it is held that thoughts may be said to be conjunctive, formed by conjunction from other thoughts. It would be natural to suppose that such a conjunctive thought is what I am thinking in some circumstances in which the following is true:

(26) Aronszajn is thinking that politicians lie and cheat.

Can it ever be the case that (26) is true in virtue of my thinking just one thought, a conjunctive one, intuitively: the thought that politicians lie and cheat? It seems natural enough to suppose that I could be thinking just this one conjunctive thought and no other, and that, if this were the case, (26) would be true. Indeed it is tempting to think that the following expresses a claim true with respect to such a situation:

(27) Aronszajn is thinking only one thing. Aronszajn is thinking: *Politicians lie and cheat.*

On the face of it, it seems that such situations are perfectly possible--that it is possible that I be thinking the conjunctive thought that politicians lie and cheat, and thinking that thought alone.

Nevertheless, there is an argument that seems to show that whenever (26) is true, I am thinking more than one thought, and consequently, whether or not there is such a conjunctive thought as the thought that politicians lie and cheat, and whether or not there could possibly be a circumstance in which I am thinking that thought and that thought alone, (26) will never be true with respect to such a circumstance. Moreover, the argument would show, contrary to what seems to me a natural first impression, that the claims expressed in (27) are literally contradictory. For I think it is plain that the second sentence of (27) implies (26), which, according to the argument, implies that I am thinking more than one thing, yet the first sentence of (27) asserts that I am thinking only one thing.

Roughly, the argument goes as follows. It seems plausible to claim that there is a certain thing I am thinking whenever I'm thinking that politicians lie, and a certain thing I'm thinking whenever I'm thinking that politicians cheat such that it is possible for me to be thinking the former and not thinking the latter. After all, can't I be thinking that politicians lie and not thinking that politicians cheat? But if we accept the indiscernibility of identicals (along with some fairly natural modal assumptions), then I think we should also accept

(InId)       $\text{nec } \forall x \forall y ( x = y \rightarrow \text{nec} ( \text{Aronszajn is thinking } x \text{ iff Aronszajn is thinking } y ) )$

From this, and our previous contention, we get that there is a certain thing that I'm thinking whenever I'm thinking that politicians lie that is distinct from a certain thing I'm thinking whenever I'm thinking that politicians cheat. Now suppose that (26) is true, that I am thinking that politicians lie and cheat. Then is it not correct to say that I am thinking that politicians lie and also thinking that politicians cheat? I am inclined to think that this is correct. That is, I am inclined to accept that 'Aronszajn is thinking' distributes over 'and', thus:

(DIST)      Aronszajn is thinking that politicians lie and  
              cheat.

-----  
:: Aronszajn is thinking that politicians lie and  
   Aronszajn is thinking that politicians cheat.

But if I am both thinking that politicians lie and thinking that politicians cheat, then our previous reasoning leads to the conclusion that there are two things I am thinking. So, no matter the circumstances with respect to which (26) is true, in such circumstances I am thinking more than one thing.

The argument may be laid out somewhat more carefully; the conclusion will be that necessarily, if I am thinking that politicians lie and cheat, then there are two things I am thinking:

## The Plurality of Thoughts Argument (PTA)

i) There is an  $x$  and  $y$ , such that:  
nec( if Aronszajn is thinking that politicians lie,  
he's thinking  $x$  );  
nec( if Aronszajn is thinking that politicians cheat,  
he's thinking  $y$  ), and  
pos( Aronszajn is thinking  $x$  and not thinking  $y$  ).

ii) (InId)

-----  
:: iii) There is an  $x$  and  $y$  such that  
nec( if Aronszajn is thinking that politicians lie,  
he's thinking  $x$  );  
nec( if Aronszajn is thinking that politicians cheat,  
he's thinking  $y$  ), and  $x \neq y$ .

SHOW: nec( if Aronszajn is thinking that politicians lie  
and cheat, then  $\exists x \exists y$ ( Aronszajn is thinking  $x$ ;  
Aronszajn is thinking  $y$ , and  $x \neq y$  ) )  
[by necessity-intro. with the following sub-proof<sup>10</sup>]

SHOW: If Aronszajn is thinking that politicians lie and  
cheat, then  $\exists x \exists y$ ( Aronszajn is thinking  $x$ ; Aronszajn is  
thinking  $y$ , and  $x \neq y$  )  
[by Conditional Proof as follows]

iv) Aronszajn is thinking that politicians lie and cheat  
[Assumption]

-----  
:: v) Aronszajn is thinking that politicians lie, and  
Aronszajn is thinking that politicians cheat.  
[from iv) by (DIST)]

-----  
:: vi)  $\exists x \exists y$ ( Aronszajn is thinking  $x$ ; Aronszajn is thinking  
 $y$ , and  $x \neq y$  )  
[from iii) and v)]

The argument can be readily generalized of course; with appropriate amendments, a parallel result can be reached concerning you and your thinking, say, that politicians are honest and fair. The result seems to be that whenever such reports as (26) are true, the subject of the report must be thinking more than one thing, and consequently, any pair of

sentences relevantly like the pair in (27) will be contradictory.

Perhaps I may be engaged in two simultaneous events of thinking, one reported by

Aronszajn is thinking: *Politicians lie.*

the other by

Aronszajn is thinking: *Politicians cheat.*

If this is a possibility, then presumably it is a case concerning which we should be inclined to say that I am thinking two things (at least) and that in virtue of my thinking these two things, (26) is true. But it is somewhat remarkable to find out that it is impossible for (26) to be true, unless I am thinking more than one thought.

PTA depends essentially on premise i), (InId) and the rule, (DIST). Surely (InId) is beyond reproach, so we must either deny premise i), reject (DIST) or accept the conclusion of this argument. It may be noted, too, that on a certain assumption about the semantic treatment of the main indicative clauses of indicative-clause ascriptions (see 4.4), premise i) can be reached by a subsidiary argument with a single extremely plausible premise. The semantic assumption is:

(A?) For any true or false indicative,  $\emptyset$ , and any term, t, the main indicative clause in  
[t is thinking that  $\emptyset$  ]  
rigidly designates.<sup>11</sup>

Perhaps, intuitively, for relevant indicative,  $\emptyset$ , we might think of the designatum of [that  $\emptyset$ ] as the thought we'd refer to by [the thought that  $\emptyset$ ]; but it makes no difference to the argument what we take the designatum to be. What is essential is that we suppose that if the main indicative clause of an indicative-clause ascription is formed from a true or false sentence, then the occurrence of that clause in that ascription rigidly designates something.

The single premise of this subsidiary argument is:

i<sub>a</sub>) pos( Aronszajn is thinking that politicians lie  
and not thinking that politicians cheat )

This seems indisputable. Now we proceed as follows: we derive the following necessitations,

i<sub>b</sub>) nec( Aronszajn is thinking that politicians lie →  
Aronszejn is thinking that politicians lie )

i<sub>c</sub>) nec( Aronszajn is thinking that politicians cheat,  
Aronszejn is thinking that politicians cheat )

Then, conjoining i<sub>a</sub>) - i<sub>c</sub>), if (A?) is correct, we may derive premise i) simply by appropriate application of existential introduction.<sup>12,13</sup>

If this subsidiary argument is accepted, we are faced with the choice of either rejecting (DIST) or accepting the

conclusion of PTA--that whenever (26) is true, and presumably whenever I am thinking a conjunctive thought that can be reported by such a sentence as (26), I must be thinking more than one thing. I do not consider either of these choices to be very satisfactory. Nevertheless, I see no motivation for the first alternative, and find the reasoning behind the subsidiary argument fairly compelling. So I am tentatively inclined to accept the conclusion of PTA. This issue of whether ascriptions of thought such as (26) imply that the subject is thinking more than one thing will arise to bother us (me at least) at several points in subsequent chapters. Be forewarned.

In the next chapter, we shall turn our attention to what I called "the semantic role" of thoughts, and the central concept involved in this role: that of a sentence's expressing a thought.

## NOTES TO CHAPTER 4

1. My use of 'generic' here should not be confused with a common use of the term in linguistic literature. On the latter usage, one speaks of generic readings of common nouns, readings on which such nouns apply to species of the things to which they apply on their "non-generic" readings, e.g.: "Dogs bark", "Do computers think?" I use the term just because, on the (family of) readings I have in mind, forms of the verb 'think' apply to events of a variety of species all of which I take to form a common genus: that of events of thinking.

2. Paraphrasing instances of the matrix

...think\*...

by corresponding instances of

...do\* some thinking...

doesn't always work. Here is an example due to Lee Bowie:

(a) I do some thinking slowly

is not close in meaning to

(b) I think slowly

The use of the gerund, 'thinking', as a "mass" noun in (a) seems to rule out an habitual or dispositional reading which is the most natural reading for (b). Nevertheless, a close paraphrase of (b) is available with "do" which brings out the "eventive" character of the relevant habitual reading:

(c) I do (my) thinking slowly

I stick to my main point which is that, in general, intransitive readings of forms of 'think', including such habitual readings as that available for (b), are event readings, in the relevant sense.

3. Russellians/Fregeans might contend that for some description 'the F', perhaps contextually determined, Max is occurrently believing a proposition in these circumstances-- a proposition expressed by

(a) The F is a mint-condition, late 70's Chippendale.

Here is where my point enters in, that there be no ad-hoc variation in the accounts one proposes in Max's case and in



veridical cases. For I find that concerning veridical cases, Kripke has offered compelling grounds (the locus classicus is in Kripke [1980]) for rejecting such Russellian/Fregean proposals as to which thought Max is having. Let us fix on a particular choice for 'the F' as an illustration. Suppose it is "The chair before me now". Now let us consider veridical cases where (6) reports the complete text of Max's thinking. Then there is some item, call it "x", that is what Max is occurrently believing to be a mint-condition Chippendale. Then I take it that he is occurrently believing a proposition whose truth relative to alternative situations depends precisely on whether or not x itself is a mint-condition late 70's Chippendale. The truth of his thought--the proposition he is occurrently believing--doesn't depend on there being any chair before him, and does not depend on the chair before him, if there is one, being a mint-condition Chippendale. But then (a) doesn't express this thought he is having. But if (a) doesn't express the thought Max is having in veridical cases of the sort in question, then it would require an ad-hoc and unmotivated shift to propose that this sentence does express a thought he is having in cases of hallucination that are, apart from the fact that he is hallucinating, relevantly like the veridical cases.

4. There are perhaps less controversial cases that call into question the idea that intransitive readings of 'think' support complement quantification. The cases I now have in mind trade on a fact not noted in the text: that on their intransitive readings, forms of 'think' seem to express properties that persons may have without bearing any attitudes towards things. In this respect, the intransitive generic readings are quite broad in their application. One may be said to be thinking in virtue, simply, of doing a lengthy calculation, or of attending to a melody that one is humming to oneself. Yet I think it is not so plausible to hold that in any such case it would be correct to say that one is thinking something.

5. Barbara Partee has pointed out that a frequentative event reading is also available for this and other instances of (F4). The reading in question is that involved in the most likely interpretation of (10) as it figures in

(a) Whenever his hypnotist commands him to do so, William thinks that Sarah will not say 'Yes'.

6. There are certain exceptions in which the indicative clause complement is replaced by a phrase that is itself formed from that clause, and whose reference is determined by that of the contained clause. For example, if we replace the complement of

(a) The defendant is thinking that the jury will acquit him.

with 'the thought that the jury will acquit him', we get

(b) The defendant is thinking the thought that the jury will acquit him.

This is awkward style, but I suppose (b) to be grammatical and I take it to imply, as does (a), that the defendant is occurrently believing that the jury will acquit him.

Perhaps, though, we could expect that an account explaining why the presence of indicative clauses as complements forces interpretations implying occurrent belief would also provide an explanation for such an implication in the present cases as well, where the complements are derived from indicative clauses.

7. This case is from Kit Fine (Fine [1989], see p.228). Fine is concerned with failures of substitutivity. There happen also to be in Hebrew both a masculine and a feminine word for the moon: 'yare'ach' (m.) and 'levana' (f.). Fine notes that

Levana tsafa rakeia

may be true, which he translates "The moon floats in (sic.) the sky.", while

Yare'ach tsafa rakeia

is false, which he translates "The moon observes the sky". (Pop quiz for the reader: Is this an example of a failure of substitutivity?)

8. Perhaps this case is best viewed not as one in which there is a shift in available readings of a single verb, but rather in which there is a shift, given the grammatical rules of agreement, in what the main verb of the sentence is--there are two verbs that count 'tsafa' among there inflected forms in Hebrew. Still, the case motivates the general concern here which is that sometimes, there may be a different interpretation available for the result of substituting one noun phrase for another in subject position of a given sentence. Some substitutions in subject position are not innocuous.

9. If indeed the shift is forced; I am not quite sure that we can't get either reading with (15b). Let p be some proposition to which Jones in fact bears the attitude of belief. Now suppose that Smith is suffering a conceptual confusion: though he knows that p is a proposition to which Jones bears belief, he also thinks that p is Jones' husband.

There is reputed to be a case of a man who mistook his wife for a hat; perhaps one might mistake another's husband for a proposition. And recall Moore's dream (for the references, see Note 2 to Chapter 2) in which he couldn't distinguish propositions from tables. Then Smith might utter (15b) intending 'believes' to have the reading on which it expresses the intentional attitude of belief. Smith's intentions, of course, aren't relevant to the question of whether this reading is available for the occurrence of 'believes' in (15b). This is a question about the semantics of English. I've described Smith's case here only to give a context in which this question might naturally be addressed. It is not clear to me whether the semantics of English allows or bars the intentional attitude reading for the occurrence of 'believes' in (15b).

10. I'm assuming quantified S5 (with =). At step iii) we should instantiate. With 'a' in for 'x' and 'b' in for 'y', this leaves us with:

nec( if Aronszajn is thinking that politicians lie, he's thinking a ); nec( if Aronszajn is thinking that politicians cheat, he's thinking b ), and  $a \neq b$ .

With necessitation of the last conjunct, we have:

nec( if Aronszajn is thinking that politicians lie, he's thinking a ).

nec( if Aronszajn is thinking that politicians cheat, he's thinking b ).

nec(  $a \neq b$  ).

We may import the content of each of these modal claims into the necessity-introduction subproof (after the first SHOW line). From these and line v), PC yields vi).

11. This assumption is intended to apply to de dicto interpretations of such ascriptions. I think it is plausible, if it is right that indicative clauses designate when they occur as complements in ascriptions of form

(F1) t is thinking that  $\emptyset$ ,

to claim that on the de dicto interpretation of such ascriptions, the indicative clauses designate rigidly. Consider a particular example:

(a) Jones is thinking that some shrewd spy is wealthy.

Let us refer to what (a) expresses, on its de dicto interpretation, as "A<sup>dd</sup>". If indicative clauses are

referential on the de dicto interpretation of ascriptions of form (F1), then  $A^{dd}$  will be true in a situation just in case Jones is thinking the referent of the indicative clause, 'that some shrewd spy is wealthy'. It does seem clear enough that, on the de dicto interpretation of (a), this clause serves in some way or other to specify what it is that Jones is being claimed to be thinking. If this is our reason for holding that the clause is referential, designating a thing Jones is thinking (if the ascription is true), then it may be noted that the clause doesn't seem to vary in which thought it serves to specify, when we evaluate the truth-value of  $A^{dd}$  from one situation to another. It is very natural to think that there is just one thought-- intuitively, the thought that some shrewd spy is wealthy-- such that  $A^{dd}$  is true just in case this thought is something Jones is thinking (just one of several things, if PTA), whichever situation we are considering. If we think that the indicative clause, as it occurs in the ascription, is functioning as a designator of this thought, then we ought, it seems, grant that the designation is rigid.

It is less plausible, I think, to claim that indicative clauses in ascriptions of form (F1) are rigid designators, when those ascriptions are interpreted de re. One way that has been proposed for understanding this interpretation of instances of (F1), is to view these ascriptions, on this interpretation, as asserting a relation, not between person and thought, but rather between person, attributed property, and a thing to which the property is attributed (or person, attributed relation and an ordered sequence of things to which the relation is attributed; for simplicity, I shall confine my attention in what follows to the least complex cases). The view would be that an instance of the form:

(F1')      t is thinking that t' VP

interpreted de re, expresses the same thing as the following ascription, which is taken to be more perspicuous as to logical form:

t is attributing the property of VPing to t'.

Here there are three principal referential positions, the first occupied by a term referring to the subject of the attribution, the second, by a term designating the property being attributed, the third, by a term designating the thing to which the property is being attributed. On this account, the de re interpretation of (a) would consist of a straightforward existential quantification on the third position, thus:

(a')      There is some shrewd spy, x, and Jones is attributing the property of being wealthy to x.

Interpreting (a) this way, one would not claim that its indicative clause designated, for we find that upon proper regimentation as (a'), there is no designating occurrence of the original clause; there are no occurrences of indicative clauses at all.

(Barbara Partee has pointed out a difficulty with this particular variant of such an account: it is fine to propose attribution as the relation expressed in the more perspicuous paraphrase of the de re interpretation of belief ascriptions, but then what relations are to be cited in paraphrases of such interpretations of ascriptions of other attitudes, e.g., hopes, wonders, fears, etc. What systematic way is available for coming up with appropriate, three-term relations? An early account of the de re along these lines is to be found in Quine's [1976]. However, Quine does not propose attribution as the relation involved in the more perspicuous paraphrase; rather he proposes that we acknowledge some three term relation expressed by the English verb phrase

x believes of y that  $\phi_y$

where substituends of [that  $\phi_y$ ] (with 'y' free) are taken to denote properties (and on this, of course, Quine expresses misgivings). On Quine's way, there is more hope of a systematic treatment for de re interpretations of ascriptions of other attitudes, for we may allow three term relations for each of the following:

x hopes concerning y that  $\phi_y$

x wonders concerning y whether  $\phi_y$

x fears concerning y that  $\phi_y$ , etc.

derived fairly (!) straightforwardly from the original ascription. There is a lot more to say on the matters raised here, but I am not prepared to do such matters justice on the present occasion.)

There is another account that has been proposed of de re interpretations of attitude ascriptions. On this account, instances of (F1) do report relations between persons and thoughts, interpreted de re, but the thoughts reported are not in general the ones designated, on the de dicto interpretation, by their indicative clause complements. On this account, it would be claimed that the logical form of (a), interpreted de re, is best reflected by the following:

(a'') There is some shrewd spy, x, and Jones is thinking that x is wealthy.

A proponent of this view might hold that the occurrence of

the indicative clause in (a'') designates rigidly. But there is still no occurrence in (a'') of the indicative clause of (a). So (a) would still not be seen as asserting a relation between Jones and a designatum of that particular clause. (Accounts along these lines have been proposed by various writers; see Kaplan [1989b], Salmon [1986], and Soames [1987b].)

On either of these two accounts of the de re, we do not get support for the semantic assumption at issue in the text, concerning the rigid designation of indicative clauses in these ascriptions. However, it is not so relevant for present purposes to pursue alternative accounts of de re interpretations. The most natural interpretation of step iv) of PTA, i.e., of

(27) Aronszajn is thinking that politicians lie and cheat.

is certainly de dicto. We may take PTA, then, buttressed with the subsidiary argument for premise i) relying on (A?), to purport to establish that on this very natural reading of (27), the truth of the ascription entails that I am thinking more than one thing.

12. With a free logic, it would be required, additionally, that there is an  $x$  such that  $x =$  that politicians lie and there is a  $y$  such that  $y =$  that politicians cheat. This requirement may sound odd, but isn't it an obvious implication of the following, which doesn't sound odd at all and is surely true: one thing that can be thought is that politicians lie, and one thing that can be thought is that politicians cheat.

13. I should stress that nothing in what I have assumed in this study so far requires that indicative clauses are designators, let alone that they are rigid designators. I have assumed that there is a relational reading of 'is thinking'; then it follows that the verb, on that reading, admits introduction of referential terms in a complement position. I am prepared to allow, further, that indicative clauses occur as complements of the verb, on the relevant reading. Does it clearly follow that when indicative clauses occur as complements of 'is thinking', on that reading, those occurrences are referential? Consider an analogy. 'is kicking' takes referring terms as complements, as in

William is kicking his favorite football.

and, in the same sense, the verb admits prepositional complements, as in

William is kicking with his right foot.

Is it clear that we should infer from these facts that when prepositional phrases occur as complements of 'is kicking', those occurrences are referential ones? I think it is not.

It is true that there is further evidence in the case of indicative clauses, that when they occur as complements of 'is thinking', they are functioning as designators. Various syntactic and logical features suggest this, in particular: propriety of passive transformations and acceptability of existential generalization on the position these clauses occupy (for further discussion of these features, see Chapter 3, section 3.2.4). But whether or not it should be claimed that occurrences of indicative clauses as complements of 'is thinking' function as designators, let alone whether they should be claimed to designate rigidly, I do not think that these claims are clearly consequences of any assumptions I have already made.

## CHAPTER 5

### A CONCEPT OF SENTENTIAL EXPRESSION

It is astonishing what language can do. With a few syllables it can express an incalculable number of thoughts, so that even a thought grasped by a terrestrial being for the very first time can be put into a form of words which will be understood by someone to whom the thought is entirely new.

Frege<sup>1</sup>

Virtually all philosophers who accept that there are such things as thoughts, would hold, too, that there is an important sense in which a vast number of thoughts--if not all--are things that can be said to be "expressed" in language. Some such idea is commonly taken for granted in philosophical discussions; regimented versions of such an idea figure time and again as cornerstones in work in philosophy of language, philosophical logic, linguistic theory, and related areas of study.

Moreover, the concept of expression that philosophers have had in mind--what Frege meant, for example, when he spoke of language being able to express an incalculable number of thoughts--is intuitively grounded in ordinary discourse. Or so I believe. It is certainly an acceptable way of speaking to say that a person can express what he or she is thinking by a certain sentence. For example, if what William is thinking--what's occurring to him, what's crossing his mind--is that Sarah will not say "yes", then we would say that William can express this thing--what he's



thinking, what's occurring to him, what's crossing his mind  
--by uttering:

Sarah will not say "yes".

That such a concept exists in ordinary discourse is also evident from our use of constructions of the sort I called "displayed-sentence ascriptions", that were discussed in the preceding chapter. We allow ourselves to report the thoughts that people are having simply by displaying appropriate sentences. For example, we may report something William is thinking by issuing:

William is thinking: Sarah will not say "yes".

An ascription of this sort will be counted true only if the displayed sentence is one that the subject could use to express what he or she is thinking.

I do not say that any familiar notion involved here is precisely the concept that philosophers employ when they speak of the expression of thoughts. I do not believe there is anything answering to the description "the concept of expression of thoughts that philosophers employ". Nevertheless I think there is surely a family of more or less closely related notions to be discerned from both ordinary and philosophical discourse. In this chapter I wish to lay out the main features of at least one concept in

this family that will be important throughout the remainder of the study.

### 5.1 What Things Do the Expressing?

There has not been complete agreement among philosophers on just which things may be said, in the sense they have in mind, to express thoughts. One natural view--a view suggested by the sort of instances of ordinary usage cited just above--is that persons express thoughts, doing so in a variety of ways, but commonly, and perhaps paradigmatically, by uttering sentences. In the philosophy of language though (and in other fields where this relationship of language to thought is deemed important to theory), it is common to find talk of sentences expressing thoughts. This, perhaps, results from a certain abstraction: a shift for the sake of simplicity (to avoid any parameters unnecessary for tasks at hand) from

One expresses x by uttering S

to

x is expressed by S

Strictly, abstracting in this way is acceptable only if the thought expressed doesn't vary depending on who is doing the uttering. We shall soon see that for some sentences there is such variance in which thought is expressed, and that our

concept of sentential expression must be understood to involve a parameter that, roughly speaking, takes who is doing the uttering into account. In any case, some philosophers have been unwilling to accept talk of sentences expressing thoughts, and have maintained that other items should be seen as the things that do the expressing, some holding that persons do it, some holding that utterances of sentences are the responsible items, others preferring to speak of uses of sentences as the things that do the expressing.

Still, on each of these various conceptions--whether the idea is that persons do the expressing by uttering sentences, or that sentences themselves express thoughts, or that utterances of sentences do the job--the relationship posited is one that does connect sentences to thoughts. There may well be significant differences separating these various conceptions; and perhaps one of these points of view is conceptually fundamental, the other conceptions being definable in terms of it. For our purposes, though, what is important is that an intuitive link of the relevant sort can be discerned between sentences and thoughts; the fact is that in a vast number of particular cases, the question--Is this sentence linked, by the relation of expression, to that thought?--will be answered the same by proponents of any of these conceptions, however much these conceptions may differ from one another. Present purposes, then, do not dictate a choice as to which things do the expressing, and I will

typically settle hereafter for speaking of sentences expressing thoughts. In any example or contention important for subsequent discussions, when I say that some sentence expresses a thought, I expect that the case at hand will be one about which proponents of these various conceptions of expression would be in agreement...not about what thing, strictly speaking, is doing the expressing, but about whether the sentence and thought in question are connected according to their respective conceptions of expression.

## 5.2 Some Parameters of Expression

We want to be able to speak of the thought expressed by a sentence, and to express this functional relationship by some basic locution...

S expresses x

would be a natural proposal. However, it can be seen, strictly speaking, that it is not sufficient to speak of a sentence expressing some particular thought, simpliciter. Intuitive considerations show that it is only relative to a variety of parameters that we can speak of any thought being uniquely expressed by a given sentence.<sup>2</sup>

### 5.2.1 Interpretations

I assume that some languages may be said to have sentences in common. And I assume that in the case of

certain sentences, it will be sufficient to posit which of the languages containing that sentence is in question, to determine which thought is expressed. In such cases, then, it would suffice to have a parameter for language:

S expresses x in L

With some sentences, specifying language will suffice, but not all. A natural language typically contains ambiguous sentences--sentences that have more than one available interpretation in the language. And typically, the interpretations that an ambiguous sentence has in a language will be ones relative to which the sentence expresses different thoughts.<sup>3</sup>

If an expression is ambiguous in a given language, then roughly speaking there is more than one set of rules and conventions each of which governs some one strict and literal usage for that expression in the language (I count sentences as expressions here). I shall speak of any such set as a particular **meaning** that the expression has in the language.<sup>4</sup> Then an **interpretation** may be understood to be any function,  $i$ , such that, for some language  $L$ : 1) the domain of  $i$  is the set of sentences in  $L$ , and 2)  $i(S)$  is a meaning that  $S$  has in  $L$ . Any functions related in this way to a language,  $L$ , shall be termed " $L$  interpretations". Any two  $L$  interpretations will agree in their assignments to the unambiguous sentences of  $L$ ; they may agree in their assignments to different sentences as well (in the case of

synonymous sentences). But there will be L interpretations that disagree in their assignments to any ambiguous sentence.

In preceding discussions, I have spoken of ambiguous sentences having several available interpretations, as if such sentences were distinguished by there being several interpretations with those sentences in their domains. But any sentence of a given language, L, figures in the domain of every L interpretation. When I say that ambiguous sentences have more than one available interpretation, I may be understood to mean that, where L is the language in question, these sentences each have more than one meaning to which L interpretations assign them.

The concept of interpretation at issue here is subsumed by the general notion of the reading of an expression in a language, and consequently akin to the notion of a reading of a verb or verb phrase introduced in Chapter 2. In a full account of these concepts, one would want to develop the idea that readings in general are governed by a principle of compositionality, and that, in the case of interpretations, the interpretations available for a sentence will be determined at least in part by the readings available for the constituents of the sentence.

If we incorporate a parameter for interpretations, we may drop the reference to language. Then our locution would be:

S expresses x on i

with the assumption that for any S, x and i, S expresses x on i only if S is a sentence of a language L, and i is an L interpretation.

### 5.2.2 Indexicality and Use

If an L interpretation is specified for a given sentence, one particular meaning that the sentence has in L is thereby determined. And with many sentences, this will suffice to determine what thought is expressed--with many sentences, but not all.<sup>5</sup> In English and other natural languages, there are certain expressions, so-called **indexicals**, that have the following characteristic: if a sentence of the language contains such an expression,  $\emptyset$ , then which thought is expressed by the sentence will not be determined once and for all by the meaning of the sentence alone, but will vary from one use of the sentence to another, in a way having to do with certain features of involved uses of  $\emptyset$ . Personal pronouns ('I', 'You', 'me', 'yours', etc.) and demonstratives ('that', 'these', 'then', etc.) along with certain adjectives, adverbs and adverbial modifiers ('present', 'now' 'here' 'actually' etc.) are standardly taken to be examples of English indexicals.

Before discussing the connection between indexicals, uses and the expression of thoughts, let me mention a few background assumptions. I take a use of an expression

(sentence, word or phrase) to be an event of a certain kind, and I propose to confine attention here to linguistic uses of expressions.<sup>6</sup> I suppose that typical examples are events of a person's uttering a sentence or a word, in the course of--as we might intuitively describe it--expressing a thought.<sup>7</sup> Also, I assume that a use of a sentence, of the sort I am considering, may be said to involve events each of which is a use of one of the words that make up that sentence; any such involved events will, then, also be uses of the sort relevant here. Finally, we assume that if S is a sentence of L, then it makes sense to speak of S expressing a thought on a use (for given L interpretation).

Briefly, let's consider a case that serves to illustrate the point that if a sentence contains an indexical, then which thought is expressed by the sentence will vary from use to use, depending on features of involved uses of the indexical. I shall assume that

(1)           You are ill.

is an acceptable example of an unambiguous sentence in English. In this connection, it is important to see that the word 'you' itself is unambiguous; the one meaning it has in the language is indicated (well enough?) by noting that it is a pronoun whose denotation is restricted in such a way that, on any occasion of use, it denotes the person or persons being addressed. Then, if it is granted that (1) is unambiguous (in English), and yet there is found to be an



intuitive variation in which thought can be expressed by (1) (in English), this variation will not be attributable to any shift from one of the sentence's English interpretations to another.

Now let *u* and *u'* be two uses of (1), and suppose that I am the one being addressed by the use of 'you' involved in *u*, whereas you are the addressee of the use of the pronoun involved in *u'*. I think it is intuitively clear that there is a unique thought expressed by (1) on either of these uses, but that the thought expressed by (1) on *u* is distinct from the thought expressed by (1) on *u'*. The first thought concerns me not you; the second concerns you not me.<sup>8</sup>

Note that the selection of *u* and *u'* was arbitrary, subject only to the provision that the two uses are ones involving uses of the personal pronoun addressed to different people, you and me. And the choice of distinct addressees was arbitrary as well. So, it appears to be a sufficient condition for getting distinct thoughts expressed by (1) (in English) on given uses that the involved uses of 'you' have different addressees. Moreover it appears to be a necessary condition as well: If uses are picked that have in common who is addressed by the involved uses of 'you', it is intuitively clear that the same thought is then expressed on those uses. Consider, for example, which thought we should say is expressed by (1) on either of two uses, one where the user is you, the other having me as the user, but

both involving uses of 'you' addressed to me (I am facing a mirror, perhaps, persuading myself not to go out for the evening). I think it is clear that the same thought is expressed by (1) on either use.

Consequently, which thought is expressed by (1) does not depend solely on what meaning the sentence has (on a given interpretation). Rather, there are different thoughts expressed by the sentence on different occasions of its use, despite the fact that it has only one meaning in English, and which thought is expressed on a given use may be seen to depend on a particular feature of the involved use of 'you', namely, which person is the addressee of that use. Like considerations suggest an analogous dependence on features of use in determining which thoughts are expressed by sentences containing other expressions standardly considered to be indexicals. Which thought is expressed on a given use by a sentence containing 'I', for example, will depend on who is the user (of the involved use of 'I'); which thought is expressed on a use by a sentence containing 'that cat', will depend on what thing is the demonstrandum (of the involved use of 'that cat').

More generally it appears that with any indexical term,  $\emptyset$ , we may associate a family of features of use,  $F$ , such that if a sentence contains occurrences of  $\emptyset$ , which thought the sentence expresses on a use,  $u$ , will depend on which of the features of  $F$  is exemplified by the uses of  $\emptyset$  involved in  $u$ . In the case of 'you', for example, the relevant

family of features includes exactly those features,  $f$ , such that for some  $x$ ,

$f =$  the property of being a use addressed to  $x$ .<sup>9</sup>

### 5.2.3 Contexts

I propose to accommodate this variation in which thought a sentence expresses in a way that has become pretty much the standard, by adopting a parameter slated for contexts of use. Some possible situations are such that for a given sentence,  $S$ , there is a single use of that sentence in the situation. I shall call such a situation a context of use for  $S$ .<sup>10</sup> I shall suppose that by specifying a context of use for  $S$ , we may determine a set of features of use of whatever families are relevant to the use-to-use variation in which thought this sentence expresses.

Then, the locution I shall adopt for the concept of sentential expression will be:

$S$  expresses  $x$  on  $i$  with respect to (wrt)  $c$ .

It is important to keep in mind that the sole function of this added parameter of context is to fix, for any sentence containing indexicals, whatever features of a given use of the sentence are relevant in determining the thought expressed on that use.

We make the following assumption concerning the concept expressed by this locution:

(A8)  ~~$\forall x \forall i \forall c$~~  ( if S expresses x on i wrt c, then c is a context of use for S, and  $\exists L$  ( L is a language, S is a sentence of L, and i is an L interpretation ) ).

Before proceeding let me consider some matters of terminology: suppose that we are concerned with the thought expressed by a sentence that is unambiguous in a certain language L, and we are interested in the thought expressed by this sentence on its L interpretations. It is simpler to speak of the thought expressed by the sentence in L (wrt a context), rather than saying "on any given L interpretation" or like phrase. Provided that the sentence is unambiguous in L, this procedure will suffice. So, for example, with a given context, c, we may speak of the thought expressed by (1) in English wrt c, and which thought we are speaking of will be well defined, assuming that (1) is indeed unambiguous in English. In what follows, I will occasionally omit reference to interpretation (or language) or context altogether in speaking of the thought expressed by a sentence. On such occasions, there will always be some language, interpretation or context, as the case may be, that is pretty obviously the one intended. If the omission occurs in my formulation of a principle or definition, it may be assumed (unless otherwise noted) that I have a generalization in mind that holds with respect to any interpretation and context.

Consider the following sentence

(2) There are at least three dishonest politicians.

I assume that (2) is unambiguous in English, and that it involves no indexical elements. Then on the present conception we may say that this sentence expresses the same thought in English wrt one context as it does wrt any other.<sup>11</sup> But is this an intuitively acceptable result?

What about contexts of use for (2) in which the uses of the sentence are in other languages that happen to count (2) as a sentence?<sup>12</sup> Does (2) express the same thought wrt those contexts? On the present conception of sentential expression there will be cases with respect to which it is correct to say that a thought expressed by a sentence in a given language, and wrt a given context, is distinct from any thought expressed by that sentence in the language used in that context. This may seem counterintuitive and perhaps it will be worthwhile to consider such a case.

I suppose that for any linguistic use of an expression there is some language that may be properly identified as the language of use. Intuitively, this will be the language in which the user is doing the uttering. Concerning some uses, it may be difficult to determine which language is the one of use; presumably, the matter depends principally on the user's intentions in uttering the sentence, though exactly how it depends on such intentions I don't propose (nor am I prepared) to say. And I suppose that it is

possible for there to be a language, call it English\*, counting (2) as a sentence but in which the meaning of (2) is rather the English meaning of

(2\*)            There are at most four roast dumplings

What is expressed, according to the present conception, by (2) wrt a context in which the use of (2) is in English\*? (A cook, we may imagine, is warning the waiters about the shortage in dumplings.) Let 'c<sub>2</sub>' denote the context in question. It may seem somewhat counterintuitive to say that the thought expressed wrt c<sub>2</sub> is one that has to do with the number of dishonest politicians. Indeed, this is not what we should say if the intended question is: what thought is expressed by (2) in English\* wrt c<sub>2</sub>? A proper answer to this question is rather what we would expect: that the thought expressed is the same one expressed by (2\*) in English--a thought having to do, not with the number of dishonest politicians, but with the number of roast dumplings.

But there is also, on the conception I am proposing, a clear question posed by asking: what is expressed by (2) in English wrt c<sub>2</sub>. The answer to this question is that (2) expresses the same thought in English wrt c<sub>2</sub> as it does wrt any other context: a thought concerning dishonest politicians, true relative to and only to those situations where there are at least three of them. It may seem odd to

say that any thought at all is expressed by (2), in English, with respect to some context where the sentence is used in another language. But as long as there is not contextual variation in which thought the sentence expresses, specification of a context is otiose. In the case of (2), we already have our thought in hand, independent of fixing the contextual parameter; it's been determined by the meaning of (2) in English. Imagine that we are viewing the situation in which the chef is uttering (2), speaking English\*, and it is put to us: "What has just been expressed in English?" I take there to be one clear sense of this interrogative such that, if we know the meaning of (2) in English, even if we haven't the slightest idea of what language is being used, the question asked is one that we can answer.<sup>13</sup>

### 5.3 A Not Purely Semantic Conception

The notion of sentential expression that I have intended to isolate is, in a certain sense, a purely semantic conception. What is expressed by a sentence is determined as far as possible by the meaning of the sentence--by the rules and conventions governing its strict and literal usage. It is true that in the case of a sentence containing indexicals, meaning alone does not suffice to determine what is expressed. However, by indicating a context, we specify all features of use

relevant for the contained indexicals; the meaning of the sentence, together with this information supplied by the context, does suffice to determine which thought is expressed. It is a feature of the present concept of sentential expression that considerations having to do with what the speaker in a given context intends to be conveying to his or her audience will not, in general, be relevant to which thought is expressed;<sup>14</sup> a point that can be seen from the example above concerning the cook's English\* use of (2). Also, considerations concerning pragmatic principles will not, in general, be relevant in determining which thought is expressed. These are two marks of the notion of sentential expression adopted here in virtue of which it may be said to be a purely semantic conception, two marks that distinguish this notion from a certain other conception of "what's expressed" that is also familiar and that also has a fairly clear application to certain cases. It will be worthwhile to consider an example that highlights the difference between our concept and this other one.

Consider a case of irony: Sarah and I are having a conversation at a party and she has made it clear that she's operating in a facetious mode; she's made plenty of obviously sarcastic remarks already. I have just exclaimed that I am very unhappy at how many of our country's politicians are dishonest, to which Sarah replies (with a nudge), "Oh Aronszajn, there aren't any dishonest politicians."



I take it that

(3)           There aren't any dishonest politicians.

is unambiguous and free of indexicals, and (like (2) above) a paradigm of the sort of sentence that does not vary in which thought it expresses from context to context. It expresses just one thought with respect to any situation in which it is uttered, no matter what the utterer is thinking, no matter what he or she means to convey to an audience, and no matter what features are displayed by any conversation in which the utterance is made. The thought this sentence expresses is one that will be true relative to all and only those situations that are free of dishonest politicians. These are all things that can be said concerning what is expressed by (3), in the sense of 'express' that has been in question so far. Let us call the thought expressed by (3), in this sense, "T3". Nevertheless, it is plain enough that Sarah is agreeing with me in her facetious way, and it is clear that, in uttering (3), the thought she means to convey, call it "T3\*", is one that is not true in situations where there are no dishonest politicians. Plainly, then, T3\* and T3 are different thoughts.

Now I think it must be acknowledged that there is a familiar sense in which, in the case of irony described above, it would be uncontroversially correct to say that Sarah has expressed T3\*, and not T3. If, in response, I

were to ask Sarah:

"Are you saying that there are lots of dishonest politicians?",

I could expect her to pat me on the back, congratulating me on catching her drift; "yes" would be the correct answer to my question. It seems to me that there is, derivatively, a sense in which it would be proper to say that the sentence Sarah has uttered expresses  $T3^*$ , and not  $T3$ , in this situation. I shall suppose that there is such a sense. It should be clear, however, that for a thought to be expressed with respect to a situation, in the purely semantic sense I have been concerned with, is not for that thought to be expressed in the situation, in this derivative sense I have just now suggested. In the former sense,  $T3$  is what's expressed, in the latter sense, not.

To determine which thought is expressed in a given situation, in this other sense now at issue, it is necessary to consider which thought the user intends to convey or express. The fact that it is, in this sense,  $T3^*$  that is expressed stems in part from the fact that Sarah is being facetious; I take it that this depends in turn on what it is that Sarah means or intends to express or convey in the situation. Also, that Sarah successfully expresses  $T3^*$  in this situation, and hence, in turn, that her sentence may be said, in a derivative sense, to express that thought in the situation, depends on features of the conversation she and I

are having. The conversation must accord with certain pragmatic principles, in particular, with maxims governing the proper use and expression of irony. I suppose that one such principle or maxim sets certain standards of explicitness: if Sarah had not made it sufficiently explicit that she was being facetious, then her remark would not be (or at least not so clearly be) counted as having the desired effect: that of expressing T3\*. In these respects, then, this other conception of what's expressed differs from the purely semantic one I have been concerned with up to now.

I believe that both of these notions of sentential expression may figure in our intuitions concerning which thoughts are expressed in everyday contexts of use.<sup>15</sup> In what follows, though, any principles, assumptions or contentions that involve a concept of sentential expression should be understood to involve the original, purely semantic notion. I have attempted, here, to draw attention to the existence of another, not purely semantic conception of what's expressed mainly as a preventative measure. Suppose I claim at some point that a sentence, S, expresses a certain thought, x, with respect to some context, c. The reader may envision situations fitting my description of c (exemplifying the same features relevant to the contributions of any contained indexicals, etc.), yet find there to be a plain sense of 'expresses' such that it is clearly true to say, in this sense, that S does not express

x in those situations. Then the reader may be tempted to suppose that my claim as to which thought is expressed by S with respect to c has been refuted. But this is too hasty. To refute my claim, it doesn't suffice to adduce situations such that, in some sense or other (perhaps quite familiar), it is clearly true to say that S doesn't express x in those situations.

#### 5.4 Some Final Provisos

Before proceeding, it is worth stating a few provisos concerning the range and application of this purely semantic concept of sentential expression.

##### 5.4.1 Thought, Expression and Utterance

Perhaps the most familiar occasions on which we would ordinarily speak of thoughts getting expressed by sentences are those in which a person has been thinking a certain thought, utters a sentence, and thereby, as we would intuitively put it, expresses what he or she has been thinking. Sarah is thinking that the chairman has put on a little weight, and she tells me so, uttering:

"The chairman has put on a little weight."

Certainly a thought has been expressed. The reader would be correct to anticipate, however, that on the present conception of sentential expression, there are sentences

that express thoughts that have never been, are not, and will never be what anyone is thinking, and there are thoughts expressed by sentences that have never been, are not being, and will never be uttered.

#### 5.4.2 Expressing Emotions, etc.

There are a lot of things besides thoughts that, in some sense or other, may be said to be expressed by sentences: we may speak of expressing emotions (anger, happiness, frustration), of expressing various attitudes (intentional or otherwise--belief, desire, disdain, pity), and odd and sundry other things (rumors, opinions, ideas). Some such talk is to be found in preceding chapters of this study. It is a feature of the concept of sentential expression adopted here, that if a sentence expresses a thing, for a given interpretation and context, that thing is a thought. I do not propose to examine whether these various other uses can be understood by appeal to the present notion.

Two last provisos concern some limitations on the link established, by the present notion of expression, between the domains of sentence and thought.

#### 5.4.3 Performatives

There are sentences that we might be inclined to say do not serve the purpose in ordinary use of expressing thoughts. So-called performatives are cases in point. Instances of the following schema are examples:

(F1) I hereby promise to  $\emptyset$ .

It may be observed that in normal contexts of use, the speaker does not intend to express a thought when he or she utters an instance of (F1); rather, the purpose is normally that of making a promise. Some might conclude from this observation that such sentences do not express thoughts at all (i.e. with respect to any contexts); they are just not sentences of the appropriate sort.

Let me set aside the question of what should count as a "normal" context of use, and of whether it would follow from the fact that no thought is expressed in any normal context, that no thought is expressed in any context. I am prepared to allow that there is a sense in which, concerning typical cases of the use of an instance of (F1), it would be correct to say that the sentence does not express a thought. I have in mind some sense of 'express' akin to the not purely semantic one discussed in 5.3. However, from the fact that no thought is expressed, in this sense, by such a sentence in a given context, it does not follow that there isn't a thought expressed by the sentence, in our sense, with respect to that context. I am inclined to think that there are contexts and thoughts such that instances of (4) express those thoughts with respect to those contexts. Consider

(F1') He thereby promised to  $\emptyset$ .

Aren't there plenty of contexts relative to which instances of this schema should be said to express thoughts? And wouldn't it be proper to say that corresponding instances of (F1) and (F1') express the same thought relative to contexts c and c' (respectively) such that the user in c = the demonstrandum of 'he' in c'? (Some further constraints on c and c' are required, I suppose, concerning the contributions of 'hereby' and 'thereby'.) I am inclined to think so.<sup>16,17</sup>

#### 5.4.4 Inexpressible Thoughts?

It is not universally agreed that for every thought there is a sentence that expresses it. Perhaps some thoughts are somehow too complex or too "large" to even possibly be expressed in any language. The Propositional Tradition and the alternative to it that I describe in Chapter 9 are both mute on this matter. Moreover, it's not as if, to put it roughly, the spirit of either account of the nature of thoughts suggests any generalization that would rule out one side or the other of the present issue. So I think it is safe and best for present purposes to suspend judgment on whether, for every thought, it is at least possible that there be a sentence in some language that expresses it. I think the matter is important and interesting, and one that ought to be settled by any adequate, complete account of the nature of thoughts and of the relationship of language to thought. Such an account does not lie within the intended scope of the present study.

The two provisos just considered in 5.4.3 and 5.4.4 concern certain limitations that some might wish to impose on the relation of sentential expression. Despite these provisos, it is still safe to say that virtually all philosophers who have accepted that there are such things as thoughts would hold i) that sentences do express thoughts (in a sense of 'expresses' relevantly like the one I have sought to isolate in this chapter), and ii) that the set of things expressed, in that sense, by a vast number and wide variety of sentences coincides with a vast and varied (though perhaps proper) subset of thoughts. In the next chapter, I shall present and discuss what I believe is an important addition to this thesis that sentences express thoughts, an addition that, broadly speaking, connects certain types of sentence to certain types of thought by appeal to our relation of sentential expression.



## NOTES TO CHAPTER 5

1. Frege [1963], p.537.

2. My thoughts on the topics discussed in this section have been greatly influenced by David Kaplan's ideas concerning the the semantic treatment of sentences containing indexicals. The influence has come, in part, from reading Kaplan's own work, especially Demonstratives (Kaplan [1989b]).

3. To use a worn and weary example, we may note that what thought is expressed by

(a) Jones owns both banks.

will depend on how we disambiguate the sentence, on which of its interpretations we pick: on one of these it has a meaning close to that of

(a1) Jones owns both river sides;

not close to that of

(a2) Jones owns both financial institutions.

On another available interpretation, (a) has a meaning close to that of (a2), not close to that of (a1). And these two sentences, (a1) and (a2), in virtue of having these different meanings, express different thoughts.

Another way of accomodating ambiguity relies on individuating sentences (and other expressions) more finely. In the case just discussed this way of handling ambiguity would claim that there are two words spelled the same, B-A-N-K, and two corresponding sentences either one of which is exhibited in (a) above. Disambiguation, then, will be an operation mapping, not sentences to meanings, but rather spellings to sentences, since on this way of handling matters, each sentence of the language has exactly one meaning.

I believe that the approach taken in the text, of supposing that one and the same word or sentence may be said to have several meanings relative to varying interpretations, is acceptable for purposes at hand.

4. The term 'meaning' has a history of conflicting usage in philosophy. Some have used the term in such a sense that, when they speak of the meaning of a sentence, they are speaking of what I would say is the thought expressed by the sentence. It should not be expected that this usage

coincides with the one intended with the loose and brief characterization just given in the text.

5. According to a view advanced by Mark Richard and Nathan Salmon, hardly any sentences would be such that their meanings alone determine what is expressed. See Note 11 below for references and a brief discussion of this view.

6. Suppose that Jones has switched on a certain neon sign that says "We sell cars". He's in a car lot late at night, and since he's dropped his keys on the ground, he needs some added light in order to find them. Is this a use of the sentence 'We sell cars'? I'm inclined to say it isn't. It is, certainly, a use of the neon light bulbs that happen to form a physical token of that sentence. Perhaps, though, there is some attenuated sense in which we should allow that Jones has used the sentence. In any case, whether or not the case involves a use of the sentence, it does not involve what I mean when I speak of a linguistic use, and so, if it is a use of the sentence at all, it's an example of a sort that I am proposing to ignore.

7. Perhaps we might count, as well, some events that are not ones of a person's uttering anything, but are events of this person's thinking something by means of a sentence--I have in mind the sort of event reported by the displayed-sentence ascriptions that were considered in the previous chapter. Perhaps, however, such events should be understood to involve utterances of a certain sort, not public, overt utterances, but rather mental utterances, utterances sotto voce. Then we might maintain that any events that are uses of sentences, in the sense in question, are events that are events of a person's uttering a sentence. I do not think it is necessary for present purposes that we settle this matter.

8. A fairly simple argument can be given for the claim that the thoughts expressed by (1) on *u* and *u'* are distinct if we appeal to the notion of a thought's being true or false relative to situations. Let 'T(*me*)' denote the thought expressed by (1) on *u*, and 'T(*you*)' the thought expressed by (1) on *u'*. The question is whether T(*me*) = T(*you*). But it seems intuitively plain that T(*me*)--the thought expressed by (1) when I am being addressed--is a thought that is true relative to any situation provided that, in that situation, I am ill; T(*me*) may be true relative to situations where you are as healthy as can be. On the other hand, it seems just as clear that T(*you*)--the thought expressed by (1) when you are the addressee--will be true relative to a situation only if you are ill in the situation. So, there are situations relative to which T(*me*) is true while T(*you*) is false, ones where I am ill and you are not; let *s\** be such a situation. Then I take it that

T(me) has the property of being true relative to  $s^*$ , a property lacked by T(you). Then, provided that discernibles are not identical,  $T(\text{me}) \neq T(\text{you})$ . Perhaps this argument will not persuade die-hard proponents of the view that 'you' is not an indexical and that (1) does not vary, in the way I've suggested, in which thought it expresses from one use to another. Nevertheless, the argument seems to me to be conclusive.

9. I am not at all certain that the functioning of indexical expressions in any language can always be accounted for in this way by appeal to some associated family of features of use. Moreover, it would be an oversimplification to suppose that all variation in which thought is expressed, from one use of a sentence to another, is the result of the presence of some expression or phrase in the sentence. Let us say that a sentence is use-sensitive on an interpretation, just in case which thought it expresses on that interpretation varies from use to use (this is pretty much Kaplan's notion of context sensitivity). In the case of some sentences, their use-sensitivity results from a certain form of a contained expression or from a syntactic feature of the sentence itself.

A clear example of this, as I see it, is in the case of imperative sentences in English. I believe these are in general use-sensitive, but imperatives needn't contain any indexicals. An imperative free of indexical terms is use-sensitive in virtue of its being an instance of a particular grammatical construction. I will discuss the matter of imperative sentences expressing thoughts in the following section. My point here is only that, as I see it, an explanation of use-sensitivity by appeal to an association of families of features of use to certain lexical items will not be adequate.

10. This is a departure from a certain canonical conception. Standardly, when contexts are introduced in discussions of formal semantic theory, they are taken to be (or to be idealizations of) situations, but not generally situations in which some sentence or other is being uttered or otherwise used. (See Kaplan [1989b] pp. 492-512, and [1989a], pp. 591-98; also Cresswell [1973], especially pp. 109-19, and Lewis [1980].) And there are some good reasons, for semantic and logical purposes, for not requiring that contexts involve uses of sentences, generally. (Again, see Kaplan [1989b], p. 522.) Still, I think any intuitions we have concerning what a sentence (in particular, a sentence with indexical constituents) expresses with respect to a situation are guided by consideration of situations in which that sentence is used. It will not undermine any central points in what follows if we continue to conceive of contexts as bona-fide contexts of use.

11. Pace Mark Richard and Nathan Salmon. These two authors (along with many others) maintain that which thought is expressed by a sentence such as

(a) There are exactly three dishonest politicians

depends not only on the meaning of the sentence but as well on the time of utterance. (a), it would be claimed, expresses a different thought at 6:00 a.m. GMT, 12/20/1990, than it did at the same time of day, 12/20/1853.

To use Salmon's terminology, the meaning of any sentence that lacks a time indication for the main verb, does not suffice to determine a thought expressed, even when none of the constituent expressions are indexical. Salmon does propose that there is a class of items determined by the meanings of such sentences alone--what he refers to as "information-content bases"--but he does not equate these with thoughts expressed. The result is that, on Salmon's view, the sentence as a whole is seen to behave as if there were an indexical element in it, since which thought it expresses varies from context to context.

For further discussion of this perspective, See Richard [1981] and [1982], and Salmon [1986], pp. 24-40. I do not find the arguments put forward for this view about time-indication-less sentences very persuasive, but the grounds for my reservations are not germane to any points essential to the main views I am developing here. I shall set this dispute aside in what follows and proceed with the assumption that such time-indicationless sentences as (a) are not use-sensitive.

12. There is a thicket of issues that I find puzzling here. Suppose that I say "That is a sentence of English," referring to a sentence tokened by some batch of chalk marks on a blackboard. Suppose what I say is true. The next day I say "That was a sentence of English.", referring to a sentence tokened by a bunch of sounds produced by my wife during a conversation at the dinner table. Suppose again that what I've said is true. Could the same English sentence be at issue on the two occasions? Presumably so. Then whatever English sentences are, they must be items that can have both batches of chalk residue and bunches of sounds as tokens.

Call the batch of chalk marks and the bunch of sounds cited above,  $t_c$  and  $t_s$ , respectively, and suppose that they are tokens of the same English sentence. Could some language have a sentence of which  $t_c$  is a perfectly good token, but of which  $t_s$  is not? I would think so. And we might be inclined to say that this will be the case if the sentence of which  $t_c$  is a token is a sentence of both languages but is pronounced differently in the other language than it is in English. But is this a necessary

condition for a language's having a sentence of which  $t_c$  is a token and  $t_s$  not? Couldn't it be that there is no overlap in the sentences of English and of this other language; rather, some of the sentences of the two languages--in particular the sentence of English and the one of this other language having  $t_c$  as a token--are just spelled the same? Again, I would think so. But then under what conditions should we say that there is a common sentence pronounced differently, and under what conditions should we say, rather, that there are different sentences that are spelled the same? (We might not even wish to say that the two sentences are spelled the same if the alphabets of the two languages are different.)

Perhaps a more fundamental pair of questions is: under what conditions is a thing a sentence of a language, and what sort of items satisfy these conditions? (Sentences, of course, but what are they?) One might be inclined to say that something is a sentence of a language if it's a bunch of words of the language put together in accordance with a rule governing the formation of sentences. But this only borrows kindred trouble from the notion of a thing's being a word in a language. We normally suppose a language to have a lexicon--a list of the basic items counted as words. But under what conditions does an item count as a word of a language, and what sort of items satisfy those conditions? (Words, of course, but what are they?)

Fortunately, we needn't (I hope) address these questions for present purposes. What I shall suppose is that an event,  $e$ , and item,  $S$ , may be so related that i)  $e$  is a linguistic use of  $S$  and ii)  $S$  is a sentence of some language. I think there are many familiar examples of pairs of event,  $e$ , and item,  $S$ , related in this way and that in many cases we have no problem in telling when such a pair are thus related or not, even if we don't have a clear idea what sort of item one (or either) of the pair is. I do not have any proposal of informative conditions under which this relation holds or of informative conditions under which an item may be said to be a sentence of a language.

13. What should we say is expressed by a sentence in a language,  $L$ , with respect to a given context, when the sentence contains a term that is an indexical according to  $L$ , but not according to the language of use? Consider the following case: A person utters (1), 'You are ill', but she is speaking a language, call it "Minglish", just like English except that the English meanings of 'you' and 'ill' are switched, respectively, with those of 'monkeys' and 'crazy'. Let us call the context in which this woman's Minglish use of (1) occurs, " $c_1$ ". Then what is expressed by (1) in Minglish with respect to  $c_1$  is the same thought expressed in English, with respect any context, by

(1\*) Monkeys are crazy.

The question of which thought is expressed by (1) in Minglish with respect to  $c_1$  should not be seen to be especially problematic.

But what is expressed by (1) in English with respect to  $c_1$ ? Here there may be a problem; for the sentence, in Minglish, contains no indexicals, and we may suppose that the woman's use of (1) in  $c_1$  does not involve a use of 'you' that is addressed to anyone. Perhaps our user is planning to write a documentary about the wild life of a tropical forest. She has just decided on her first sentence, and tried it out. Nobody's listening, nor does she think anyone's listening; she's not addressing herself; there is simply no one being addressed. The problem here is that in order to determine a thought expressed by (1) in English with respect to a context, some person or thing must be fixed as an addressee. Specifying  $c_1$  does not do the trick. As I shall propose to understand this situation, it is a case of underdetermination: there is no thought expressed by (1) in English with respect to  $c_1$ . It is worth noting, though, that we needn't attend to such cases--situations in which the value of the parameter of language and the language of use in the context do not match--in order to find examples of such underdetermination.

Consider the following case (a resemblance between this case and that of Max, the hallucinating antique dealer, described in the preceding chapter (section 4.2, pp. 16-19) should be clear). I am suffering a vivid, utterly real-seeming hallucination; I think I have just taken the temperature of a person seated in front of me, and that I am looking at a thermometer reading  $103^{\circ}$  f; I say (to this person, as it seems to me)

"You are ill."

The fact is that I really do utter the sentence (and no other use of the sentence occurs, so we have a context of use of the sentence) but there is no addressee of the involved use of the pronoun. I take the underdetermination in this case to be entirely analogous to that involved in  $c_1$ . Then, on the present conception, we should say that no thought is expressed by (1) in English with respect to this context. The fact that English happens to be the language I am speaking in this case makes no difference.

In cases where an indexical is associated with a family of features of use such that it is essential to any use that it possess some one feature of that family, cases of underdetermination will not arise involving uses of that indexical. It seems plausible to suppose, for example, that necessarily if an event occurs, then there is a specific time at which it occurs (or perhaps period during which it occurs). So, any use of an expression will have some unique time of occurrence. Then, consider the following case. A

man utters

(2\*\*) There are now three dishonest politicians, speaking a language just like English except that the word 'now' in this language means what 'at least' means in English. Let's call the language, "now/at-least English, and let "c\*\*" denote the context in which this man's use of the sentence occurs. There is a thought expressed by (2\*\*) in now/at-least English with respect to c\*\*, the same thought expressed by (2\*\*) in that language with respect to any context (for (2\*\*) contains no indexicals of this language). The very same thought is expressed by (2) in English with respect to any context. But there is also a thought expressed by (2\*\*) in English with respect to c\*\*, for although 'now' isn't a now/at-least English indexical, there was nevertheless a unique time of the man's use of the term in c\*\*. Let 't\*\*' denote that time. Then the thought expressed by (2\*\*) in English with respect to c\*\* is the same thought expressed by (2\*\*) in English with respect to any context in which the use of 'now' is at t\*\*, a thought true relative to just those situations in which there are at least three dishonest politicians at t\*\*.

There are other sorts of cases with respect to which I am inclined to say that specifying values for both of our parameters--for both interpretation (or language) and context--does not suffice to determine a thought expressed by a given sentence. Some such cases do not hinge on there being any failure to determine some relevant feature of use. The notion of sentential expression I intend is such that, in general, if a sentence contains a directly referential term, and a use of that sentence in a context, c, involves a use of the term lacking a referent, then no thought is expressed by the sentence with respect to that context. (I am using the term 'directly referential' in the sense developed by Kaplan; see Kaplan [1989b]. Salmon also provides a very clear discussion of the relevant notion in Salmon [1981], Chapter 1. Yet I do not think that all directly referential terms are indexicals; proper names, for example, are directly referential, but are not indexicals. Failure of expression of thought in such cases due to non-referring proper names, then, cannot be accounted for by appeal to an underdetermination of relevant features of use.

Some (Strawson perhaps is one) might even hold that this failure of expression is true not only in cases where there are uses of directly referential terms which fail to denote, but more generally, whenever there is a failure of reference in what he calls the "referential use" of a referring term (see Strawson [1956], p. 220-1). A full discussion of this matter would involve not only further consideration of the present conception of sentential expression, but some consideration of questions about the

nature of thoughts that are unfortunately beyond the scope of the present study.

14. Such considerations might be relevant in determining which thought is expressed, but if so, only incidentally, as when the sentence happens to begin, say, with 'The thought I intend to convey here', etc. Isn't the designation of certain indexicals, relative to a context of use, determined by the speaker's intentions? One might suppose, for example, that the matter of what thing in a context of use is the thing demonstrated, and consequently, what thing is designated by the demonstrative, 'that', relative to the context, will depend on who or what the speaker intends to be demonstrating. But I suppose that a person can demonstrate something they didn't intend to, and that a context may then assign something else, other than what the speaker intended, to the speaker's use of the demonstrative. This sort of case makes it unclear to me how speaker's intentions are to enter into the determination of which thing is designated by a demonstrative relative to a context of use, and consequently which thought is expressed, relative to a context, in the present, purely semantic sense, by a sentence containing a demonstrative.

15. The notions of reference and sentential expression are analogous in various ways. For example, the notion of a term referring to a thing calls for parameters akin to the ones posited here (of interpretation (or language) and context) for sentential expression. Kripke [1977] draws a distinction between two notions that may be intended when one speaks of the referent of a term in a situation: what he calls semantic reference and speaker's reference. I suspect that a further parallel between the concepts of reference and sentential expression is that this distinction Kripke proposed, separating semantic reference from speaker's reference, is paralleled by a distinction between two notions of sentential expression, two notions that may be intended when one speaks of the thought expressed by a sentence in a situation. I suspect, also, that if there is this parallel to Kripke's distinction, it separates notions that are close to the two concepts of sentential expression that have been under discussion in the present section. In this connection, see Salmon's distinction of speaker assertion and semantic content in Salmon [1982].

16. Is it safe at least to assume that if an unambiguous sentence does express a thought with respect to a given context, then there is only one thought that this sentence expresses with respect to that context? That is:

(A\*)             $\neg \exists x, y \forall c ( \text{if } S \text{ is unambiguous, then if } S \text{ expresses } x \text{ wrt } c \text{ and } S \text{ expresses } y \text{ wrt } c \rightarrow y = x )$



There is an argument that could be advanced against (A\*) that parallels the Plurality of Thoughts Argument (given in section 4.8 of the preceding chapter). For the sake of argument, let us assume that the sentences:

(L) Politicians lie.

(C) Politicians cheat.

are unambiguous and that each expresses just one thought. Then, briefly, the argument may be put as follows:

(L&C) Politicians lie and cheat.

expresses the thought expressed by (L), but it also expresses the thought expressed by (C). But (L) and (C) do not express the same thoughts. Consequently, there must be (at least) two thoughts expressed by (L&C). Hence it is not the case that every unambiguous sentence that expresses a thought expresses only one thought.

Details aside, why accept the premise that (L&C) expresses the thoughts expressed by (L) and (C)? We might ordinarily say that if a person has expressed the thought that politicians lie and cheat by uttering (L&C), the person has thereby said that politicians lie, and also said that politicians cheat. And one might take this as reason enough to accept the premise in question.

I would say, however, that concerning situations in which a person may be said to express the thought that politicians lie and cheat by uttering (L&C), all that can be claimed, generally, is that the person expresses something implying the thought that politicians lie and also implying the thought that politicians cheat. And I would maintain that, in the sense of 'expresses' I have intended to isolate, we should say this: (L&C) expresses a thought (in English) that implies any thought expressed by (L) or by (C), but does not express a thought identical to any expressed by (L) or by (C).

17. The suggestion here is that the "normal" function of these performatives be relegated to pragmatics, and that their perhaps not-so-normal function of expressing thoughts be taken to be their only genuinely semantic role. Perhaps this isn't right. There are two alternatives that I think are worth looking at in this connection (the following is very rough; related matters are discussed in Chapter 6, pp. 19-23; also see Notes 5 and 6 to Chapter 6).

Let us stick with the assumption that our concept of sentential expression links sentences exclusively to thoughts. But perhaps:

1) the semantics of performatives should allow that such sentences are ambiguous: on one class of interpretations,

they express thoughts; on another class of interpretations, they bear some other relation to some other sort of entity. We might say, for example, that instances of (F1) have interpretations on which they do not express thoughts but rather, say, make or convey promises (someone who proposes this can have the task of saying what promises are!). But if we allow that there is some other relationship besides expression that may be central to an account of the semantics of such sentences, then another proposal suggests itself that doesn't require positing an ambiguity. Perhaps:

2) performatives vary from context to context in what relationship they bear to what sort of items. And this contextual variation in relationships could be seen to be required by any interpretation available for each performative. Thus, instead of proposing that instances of (F1) are ambiguous, having one class of interpretations on which they express thoughts, another on which they make promises, we could hold that such sentences are not always ambiguous, and that the matter of whether one of them expresses a thought or rather makes a promise is settled by contextual considerations. An instance of (F1) will express thoughts at some contexts, but at other contexts, express no thought at all but rather make promises. This would presumably require that a new class of features of context--such as that of the speaker's intending to make a promise, and that of the speaker's intending to express a thought--be accepted as semantically relevant features in determining contextual variation.

Both of these possibilities incorporate the "normal", performative uses of performative sentences into their semantics. I do not have a settled opinion as to which of the three alternatives--the pragmatic one suggested in the text, and these two semantic ones suggested here--is preferable, but I don't believe that any matters central to the present study hinge on this question.

## WHAT INDICATIVES, IMPERATIVES AND INTERROGATIVES EXPRESS

6.1 The Expression of Thoughts by Non-indicatives

Although 'indicative' is commonly used as an adjective applying to forms of verb or verb phrase, I shall use the term here as a noun, standing for a class of English sentences which I shall assume to be familiar to the reader. The simplest, though certainly not the only, examples of what I am calling "indicatives" are sentences formed with a noun phrase subject term succeeded by an indicative verb phrase;

There are exactly two dishonest politicians.

Sarah will not say "yes".

Somebody has been eating the cookies.

are all examples of the sort of sentence I have in mind. By 'imperative' I shall mean any sentence of English having a "naked" infinitive as a main verb phrase. Examples here would be

Go get that shovel.

Somebody lend me a dime.

See that you don't do it again, Jones.

I assume that there are compound imperatives formed with various sorts of connectives ("Get that shovel and be snappy

about it") but for my purposes it will be safe to set aside consideration of these. By 'interrogative' I shall mean any sentence of English obtained from an indicative by interrogative transformation (interchanging subject and main verb or auxiliary), or by introduction of wh-terms--such terms as 'who', 'where', 'when', 'which', 'which  $\emptyset$ ', etc. I would count the following as examples:

Will you get that shovel?

Does anyone have some spare change?

Which woman will reach the finish line first?

As in the case of imperatives, I assume there to be more complex interrogatives, but I shall only need to be concerned here with the simplest examples.

When I speak of grammatical moods, hereafter, I may be understood to mean the categories of English sentences suggested above; and when I say that a sentence is of a certain grammatical mood, I may be understood to mean that it is a member of one of these categories.

#### 6.1.1 Some Examples

Throughout the preceding chapter, the examples I cited of sentential expression involved indicatives. But considerations of ordinary usage support the view that thoughts are expressed by sentences of all three grammatical moods.

At the outset of the previous chapter, I cited the following sort of case: If William is thinking that Sarah will not say "yes", he can express what he's thinking by the indicative

Sarah will not say "yes".

Cases of this sort are commonly and reasonably used to convey what is meant when we speak of sentences expressing thoughts. The sentence in this example happens to be an indicative. Analogous cases afford just as much motivation for the view that sentences of the other grammatical moods express thoughts too.

For example, if Rachel has just knocked Carl's Stradivarius to the floor and I am wishing that she would pick it up, then if my wishing is sufficiently demanding in character, what I am thinking (in at least some situations fitting this description) is expressed, with respect to this situation, if I utter:

(1) Rachel, pick up Carl's violin.

It seems natural to say that this is a case in which a thought--something I am thinking--is expressed by a non-indicative.

As another example, if I am presently wondering whether Carl will have to pick up his violin, what I am wondering, at least in some cases, is expressed by an interrogative:

(2) Will Carl have to pick up his violin?

Again, it seems plain enough that we have a case in which something I am thinking is expressed by a non-indicative.

Of course these two examples are not isolated cases. If one grants that (1) or (2) express things we are thinking when we are wishing or wondering things, the same should be granted concerning a vast number of other imperatives and interrogatives.

Before proceeding, there is a special point to be made about the claim that (1) expresses something I am wishing. There are common circumstances in which it is quite definitely the case that we are wishing things--perhaps these are even the circumstances most naturally described as ones in which we are wishing things--yet in which it is not clearly right to say that the things we are wishing are expressed by imperatives. Suppose for example that rather than being "demanding" in character, my wishing that Rachel would pick up Carl's violin is forlorn. I have no strong desire that she do it since I know that her doing it is beyond reasonable hope--she's such an obstreperous child. Still, in wishing that Rachel would pick up Carl's violin, there is something that I'm wishing. We might be inclined to say that what I am wishing in this situation is expressed not by an imperative like (1), but rather by an optative--a sentence like:

(1') If only Rachel would pick up Carl's violin,

or this rather more archaic form:

(1'') Would that Rachel would pick up Carl's violin.

It is not clear to me that we should say that (1) expresses something other than what is expressed by (1') and (1''). Perhaps there are two kinds of wishing to be distinguished by the nature of their "objects": if one is engaged in one kind of wishing, one is wishing one sort of thing--a thing expressed by an imperative--if one is engaged in the other of these kinds of wishing, one is wishing a thing of some different, non-overlapping sort, a thing expressed by an optative. On the other hand, perhaps we ought to say that (1) - (1'') express the same thing. There is an intuitive difference in what one would intend to convey to an audience by using the optatives instead of the imperative, but it is not determined by this fact alone that the thing (things?) expressed by (1') and (1'') should be distinguished from what is expressed by (1).

What does seem natural enough to say, though, is that there is something expressed by (1), and that at least some wishings are such that in virtue of the occurrence of such a wishing, its subject may be said to be wishing this thing that (1) expresses. And I take it that the same point of view is as natural as well concerning other imperatives and other cases of what persons are wishing.

In fact, I think there is a pretty simple, intuitive procedure for cooking up relevant cases. Where  $\emptyset$  is an imperative, sometimes we are wishing something and our wishing may be properly reported by a displayed-sentence ascription, a sentence of the form:

(F1) NP is thinking:  $\emptyset$

The relevant instance in the case of (1) would be:

(3) Aronszajn is thinking: *Rachel, pick up Carl's  
Violin*

I think it is very natural to say, concerning any such case where the wishing is correctly reported by an instance of (F1), that at least one thing the wisher is wishing is expressed by the imperative,  $\emptyset$ . Cases in point will include those, like the one above, where the wishing is sufficiently "demanding" in character. It is not essential for my purposes to settle whether all cases of wishings are cases in point, and I am suspending judgment on whether, in such a case--with respect to which (3) does express something true--what I am wishing is also expressed by the optatives, (1') and (1''). From here on, I shall leave the case of optatives and their connection to imperatives open.

#### 6.1.2 Qualms?

Some, though willing to grant that (1) and (2) express things that one can be, respectively, wishing and wondering might contend that neither (1) nor (2) (nor any other



imperatives or interrogatives) express thoughts. From the fact that I am presently wishing that Rachel would pick up a violin, some might claim, it doesn't follow that there is anything I am thinking. And even if I happen to be thinking something as well as wishing something, the contention might be: what I am thinking is not expressed by (1); (1) is not the sort of sentence that can ever express something a person is thinking. Consequently, the claim would go, (1) does not express a thought. My assessment of such a claim is: If what is meant by 'thinking' and 'thought' is, respectively, 'occurrently believing' and 'thing occurrently believed', then I agree entirely, but this is not what I mean, nor is it the only thing one can coherently mean, by 'thinking' or 'thought'.

In Chapter 4, I distinguished what I called "generic" readings of progressive forms of the verb, 'think'. On such a reading, it does follow from the fact that I am wishing something, that I am thinking something. Moreover, I have assumed (for supporting discussion, see Chapter 4, section 4.6), that on this reading, anything that a person is wishing is itself something that person is thinking. Suppose that a friend, Grant, is also presently wishing that Rachel would pick up Carl's violin. In that case, it follows, I claim, not only that Grant and I are wishing something in common, but that this thing we are wishing is at least one of the things we are both thinking. Perhaps in

ordinary discourse, when two people are wishing the same thing, the thing would normally be referred to as a "wish"; it is a thought nonetheless.

An analogous point applies to the case of the interrogative, (2). In that case we would ordinarily speak of the thing expressed by this sentence as a "question", but, it is nevertheless something a person may be said to be wondering; hence, in the generic sense at issue, it is something a person may be said to be thinking; hence it is a thought.

Consider displayed-sentence ascriptions, again. In such a construction, we have seen, the displayed sentence may come in a variety of grammatical moods; but whatever the mood of that sentence, the resulting ascription may be appropriate for reporting something a person is thinking. Thus, if I am asked to report what I was thinking on a given occasion, each of the following might express a correct report:

- (3) Aronszajn was thinking: *Rachel, pick up Carl's violin.*
- (4) Aronszajn was thinking: *Rachel isn't going to pick up  
Carl's violin.*
- (5) Aronszajn was thinking: *Will Carl have to pick up his  
violin?*

It should be apparent that whichever of these is my report:  
i) the report may be true; ii) in many cases at least (we noted a possible class of exceptions in Chapter 4, section 4.2) if the report is true, there is something that I may be

said to have been thinking on the reported occasion, and  
iii) it would be natural to say that what I was thinking on  
the reported occasion is expressed by the displayed sentence  
(perhaps with respect to a context, as with (3)). This  
seems to me good reason to grant that imperatives,  
interrogatives and indicatives alike may properly be said to  
express thoughts.

It might be contended that although there is a sense in  
which imperatives and interrogatives may be said to express  
things, this should not be identified with the sense of  
'express' discerned in the preceding chapter, in which, in  
the examples considered there, various indicatives were said  
to express thoughts (relative to interpretation (or  
language) and context). There presumably is some notion we  
might intend when we speak of sentences "expressing"  
thoughts such that, if it is the intended notion of  
expression, then it would be incorrect to speak of  
imperatives or interrogatives expressing anything at all.  
For example, I take there to be a clear sense in which a  
sentence may be said to express a thought subject to the  
following:

S expresses\* x =df S is an indicative; x is a  
thought, and there is some familiar reading or other of  
'expresses' such that on that reading, the pair, <S,x>,  
satisfies

[  $\emptyset$  expresses v ]

where  $\emptyset$  and v are variables.

Not that expression\* is any familiar concept of expression, but it is a concept of expression as clear as any. If by 'express' one means express\*, then one could not say that any imperative or interrogative expresses anything at all.

Nevertheless, it seems to me that there is a familiar sense in which we may be said to express what we're wishing by imperatives and to express what we're wondering by interrogatives. The sense in question seems to me to be just as familiar as any in which we may be said to express what we believe by indicative sentences. I see no reason not to suppose that there is one sense of 'express' common to all of these ways of speaking. Now alongside this familiar sense in which a person may be said to express things by sentences of any of the three moods, it seems to me that we may discern, in the manner of the preceding chapter, a sense in which those sentences themselves may be said to express those things. Moreover, it seems to me that one such concept of sentential expression that can be discerned here is a purely semantic concept.

After all, in the preceding chapter, in the course of characterizing the purely semantic conception, I made no assumptions concerning what sort of sentence was under discussion although the examples happened to concern indicatives. All the considerations raised there, concerning distinctive features of the purely semantic conception, could have been addressed with respect to

imperatives and interrogatives; or so it seems to me. Which thoughts we would intuitively be inclined to say are expressed by given imperatives and interrogatives will, at least in one discernible sense, depend on the meanings that these sentences have in English (perhaps coupled with information supplied by specifying context), and not on the sort of pragmatic considerations that were then in question, having to do with speaker's intentions or conversational maxims. I do not see any knock-down argument for the contention, but there seems to me no reason not to allow that there is a general, purely semantic concept of sentential expression according to which (1) and (2) and a vast number of other imperatives and interrogatives, as well as indicatives, may be properly said to express thoughts (relative to interpretation (or language) and context). There seems to be such a concept available for the taking. At any rate, I shall suppose that there is such a concept, and the reader may presume that I intend such a notion to be operant in all discussions to follow.

## 6.2 Thesis 2--A Partial Answer to an Old Problem

A long standing, recalcitrant problem in philosophy of language has had to do with the proper semantic treatment of non-indicative sentences--imperatives and interrogatives, in particular. It is commonly assumed in semantic treatments of indicatives that semantic values assigned to sentences

ought to serve to represent the items that we would intuitively say those sentences express.<sup>1</sup> When this assumption has been carried over to the treatment of non-indicatives, the problem has been that no straightforward answer has suggested itself to the question: what, if anything at all, is expressed by these sentences (in particular, by imperatives or interrogatives)?

From the perspective gained here, however, the answer seems plain and simple, at least for imperatives and interrogatives: imperatives and interrogatives do express things, and, like indicatives, what they express are thoughts. Moreover, from the considerations advanced just above, it should be plain that we can be somewhat more specific on the matter. We have seen that at least sometimes an imperative expresses what a person is wishing, and that at least sometimes, an interrogative expresses what a person may be said to be wondering. Further, if we reflect on any of a wide variety of ordinary cases, we find that the thoughts expressed by indicatives are the things a person may be said to be occurrently believing.

#### 6.2.1 Thesis 2, A Provisional Formulation

These observations suggest a certain generalization which I will formulate shortly. First, though, I think it will make the formulation more scrutable, and make subsequent discussions somewhat easier, if we introduce some terminology.

The common nouns, 'wish' and 'question', are ambiguous in ordinary usage; in each case, the ambiguity is analogous to that of the common noun "thought", noted in Chapter 1 (section 1.2). Consider, for example, what we refer to when we speak of a wish: on one usage we might be referring to some particular instance of someone doing some wishing; on what is surely another acceptable usage, however, we would be referring instead to what a person is wishing. An analogous ambiguity affects our use of the common noun, 'question'; it may stand for particular acts of persons wondering or asking things, or it may be applied instead to that thing the person is wondering or asking. Philosophers might employ 'occurrent belief' as a common noun: it could suffer an analogous ambiguity.<sup>2</sup> I have been using gerunds to refer to particular acts of thinking, thus, 'wishing', 'wondering' and 'occurrent believing' serve as common nouns, respectively, for particular events of wishing, wondering and occurrent believing. I propose to use 'wish', 'question' and 'occurrent belief' to apply, rather, to what is, respectively, wished, wondered and occurrently believed. Although the notions I shall propose here are technical ones, I do not think we stray much from a fairly familiar usage if we put:<sup>3</sup>

- (D8) a.  $x$  is an **occurrent belief** =df  $\text{pos } \exists y( y \text{ is occurrently believing } x )$
- b.  $x$  is a **wish** =df  $\text{pos } \exists y( y \text{ is wishing } x )$
- c.  $x$  is a **question** =df  $\text{pos } \exists y( y \text{ is wondering } x )$

In other words, 'occurrent belief', 'wish' and 'question', when used as common nouns, shall stand for items in the modal ranges of occurrent belief, wishing and occurrent believing (respectively).

Now the observations made just above can be generalized, provisionally, in the following way:

- Thesis 2
- a. indicatives express occurrent beliefs;
  - b. imperatives express wishes;
  - c. interrogatives express questions.

It seems to me that there is an idea embodied here that is extremely natural, though it has not been widely considered. Not even those who have been most concerned with the problem of providing a semantic treatment of non-indicatives have given it much attention. I shall propose refinements of each of the clauses a - c), but this provisional formulation offers an intuitive and fairly accurate grasp of the basic idea which will serve as a cornerstone for much work in the rest of the thesis.

#### 6.2.2 Refinements

As a start, let us consider the following formulations (in each, the parameter for interpretation is suppressed; assume ' $\emptyset$ ' restricted to unambiguous sentences):

- (T2a) For any indicative,  $\emptyset$ , if there is a context with respect to which  $\emptyset$  expresses something, then for any context,  $c$ , and thought,  $x$ , if  $\emptyset$  expresses  $x$  wrt  $c$ , then  $x$  is an occurrent belief.



(T2b) For any imperative,  $\emptyset$ , if there is a context wrt which  $\emptyset$  expresses something, then for any context, c, and thought, x, if  $\emptyset$  expresses x wrt c, then x is a wish.

(T2c) For any interrogative,  $\emptyset$ , if there is a context wrt which  $\emptyset$  expresses something, then for any context, c, and thought, x, if  $\emptyset$  expresses x wrt c, then x is a question.

What these clauses assert, roughly, is that as long as a sentence of one of the grammatical moods expresses something at some context, then it expresses a thought of the appropriate sort with respect to any context at all.

It will be worthwhile to consider a sample implication. The following consequence of (T2a), with

(6) You are a noisy bird

for  $\emptyset$ , is fairly representative. Perhaps it is safe to assume that there is a context with respect to which (6) expresses something;<sup>4</sup> then (T2a) implies:

For any context, c, and thought, x, if 'You are a noisy bird' expresses x wrt c, then x is an occurrent belief.

That is, (6) expresses an occurrent belief, if anything, with respect to any context. Since (6) contains the indexical, 'you', what the sentence expresses will vary from context to context depending, essentially, on what person (or bird, etc.) is being addressed. Surely, though, whatever type of addressee a context may have, the thought expressed by (6) with respect to that context could be

something someone is occurrently believing. Let *c* be any context with respect to which (6) does express a thought; can't we imagine a context, perhaps distinct from *c*, with the same addressee, but in which the speaker is using (6) in current English to express sincerely and literally what he or she is thinking? It seems that we can; and it seems to me that we ought to say, concerning any such context, *c'*, that there is a thing, *x*, that the speaker of *c'* is occurrently believing that (6) expresses, not only with respect to *c'*, but with respect to the original context, *c*, as well. But by (D8), since this thing, *x*, is at least possibly such that it is being occurrently believed, it is an occurrent belief. Cases much like this one (mutatis mutandis) motivate particular consequences of clauses (T2b) and c) as well.

Things are not quite so neat and tidy, though.

Consider:

(7) Will you please bring us a menu and a couple of glasses of your house red?

I count this as an interrogative, yet it seems to me that (7) expresses a wish--and not a question--with respect to any context, contrary to (T2c).

A generalization of this example seems to be that whenever 'please' is incorporated in "yes-no" interrogatives whose main verb phrase is formed with certain auxiliaries-- 'will' 'would' 'can' 'could' (but not 'should' or 'ought')--

the resulting interrogatives express wishes, not questions. However, I don't have confidence that this particular class of cases involving the word, 'please', in interrogatives exhausts counterexamples along this general line. An antecedent restriction in (T2c), then, ruling out this particular group of interrogatives, seems an exceedingly ad hoc way of avoiding the problem. Nevertheless, I think it would be a mistake to suppose that there is simply no coordination, along the lines suggested in (T2a) - c), between sorts of things expressed--wishes, questions, occurrent beliefs--and our three grammatical moods. The coordination may not be neat and tidy, but it exists.

I think it best to avoid the class of counterexamples noted above by adopting parallel amendments to the antecedents throughout (T2a) - c). I propose the following:

- (T2a)\* For any indicative,  $\emptyset$ , if there is a context with respect to which  $\emptyset$  expresses an occurrent belief, then for any context, c, and thought, x, if  $\emptyset$  expresses x wrt c, then x is an occurrent belief.
- (T2b)\* For any imperative,  $\emptyset$ , if there is a context wrt which  $\emptyset$  expresses a wish, then for any context, c, and thought, x, if  $\emptyset$  expresses x wrt c, then x is a wish.
- (T2c)\* For any interrogative,  $\emptyset$ , if there is a context wrt which  $\emptyset$  expresses a question, then for any context, c, and thought, x, if  $\emptyset$  expresses x wrt c, then x is a question.

These clauses tell us that if a sentence of a particular grammatical mood expresses a thought of the appropriate sort

(appropriate according to Thesis 2), then at any context at which it expresses any thought at all, it expresses a thought of that sort. (7), though an interrogative, does not express a question, but rather a wish; contrary to (T2c). However, counterexamples to the present version, (T2c)\*, will arise only if there are interrogatives that do express questions with respect to some contexts, but express thoughts of some other sort with respect to other contexts. I do not think that (7) affords any such case.

One further line of objection to these clauses is worth considering. (T2a)\* - c)\* imply that sentences of each grammatical mood will express thoughts of the relevant, associated type with respect to every context, provided that those sentences express thoughts of that type at some context or other. This may seem too strong. Consider the following case. Rachel has just knocked the Stradivarius to the ground. In a stringent tone of voice, I address Rachel, uttering:

(8)           You are going to pick up Carl's violin.

("right this minute, young lady" I might add). I count this sentence as an indicative. And I think that there are contexts with respect to which this sentence expresses occurrent beliefs. Then (T2a)\* implies that with respect to every context at which something is expressed by the sentence, what is expressed is an occurrent belief. But

what about the context just envisioned? Shouldn't we say that with respect to this context, my sentence expresses something I am wishing?

Generally, the sort of case I have in mind here is a situation in which a sentence is used and, although in other situations the sentence does express thoughts of the appropriate type ("appropriate" according to  $(T2a)^* - c)^*$ , given the sentence's grammatical mood), in the situation at hand, the sentence seems, intuitively, to express a thought that is of some type other than the appropriate one. Let us call any such case--where a sentence expresses a thought of the appropriate type (according to  $(T2a)^* - c)^*$ ) with respect to one context, but expresses a thought of another type with respect to another context--a case of "type-switching". In the example just considered, an indicative was seen to express occurrent beliefs with respect to some contexts, but, apparently, to express wishes with respect to others. There are plenty of other examples of similar phenomena: cases of imperatives expressing wishes at some contexts, apparently expressing occurrent beliefs at others ("Go to the corner; turn left and go down one block", uttered in response to "How do I get to the post office?"), cases of interrogatives expressing questions in some contexts, apparently expressing wishes in others ("Could you bring us some cookies and tea?"). Are any of these cases genuine type-switchings, or are they merely apparent ones?

There are matters raised at this point that hinge on the distinction between pragmatics and semantics, and on empirical questions about the nature of English that we needn't settle (and that I'm not prepared to address). I am inclined to think, however, that the cases suggested in the above examples are merely apparent type-switchings, or at least do not pose fatal problems for the claims formulated in (T2a)\* - c)\*. (It should be noted that even if we allow that cases of genuine type-switching exist, this is not inconsistent with (T2a)\* - c)\*. Take the case of (T2a)\*. A type-switching here will be a case in which an indicative expresses an occurrent belief with respect to some contexts, and either a wish or a question with respect to other contexts. The existence of such a case will conflict with (T2a)\* only on the additional assumption that one and the same thing expressed by the given indicative can't be both a wish and an occurrent belief, or can't be both an occurrent belief and a question. These particular assumptions do seem to me well motivated; the matter will be addressed at length in Chapter 8.) I am inclined to think that each case of type-switching can be handled in one of two ways, neither of which requires much amendment to any of (T2a)\* - c)\*.

First, take the case cited above in which I utter (8). Perhaps there is a semantic principle governing the strict and literal use of future tense according to which: if a sentence is formed with that form of an action verb together with a second-person pronoun, the sentence may be understood

to express the speaker's wishes. I am not sure about this. Even if there is such a principle, though, the semantics governing such sentences as (8) surely guarantee as well that these sentences may be used to express occurrent beliefs. Then I would be inclined to say that sentences of the forms

(F2)        You are going to VP.

(F3)        You will VP

are ambiguous, and that the appearance of type-switching, and the intuitive variation in which type of thought is expressed, is due to variation in interpretations of the sentence in question. This would suggest the following amendment to (T2a)\*, with the parameter for interpretation unsuppressed:

(T2a)\*\*    For any indicative,  $\emptyset$ , and interpretation,  $i$ , if there is a context such that  $\emptyset$  expresses an occurrent belief on  $i$  wrt that context, then for any context,  $c$ , and thought,  $x$ , if  $\emptyset$  expresses  $x$  on  $i$  wrt  $c$ , then  $x$  is an occurrent belief.

Similar amendments could be made to (T2b)\* and c)\*. It may be that a semantic ambiguity is at play in the intuitive variation in the type of thought expressed by instances of (F2) and (F3). I am not sure.

Second, there may be an apparent case of type-switching in which there is pretty clearly no ambiguity involved. Then the intuitive variation in which thought is expressed

cannot result from a variation in the interpretations of the sentence in question; consequently, our intuitions concerning such a case will not be accommodated by (T2a)\*\* or by like amendments to (T2b)\* and c)\*. There are such cases I believe. Take, for example, the following case; a teacher utters:

(9) Are you sure that you want to circle that answer?

She is speaking to a student taking a quiz, and intends to convey, by an unsubtle hint, that the answer he is about to circle is incorrect. I think the sentence may be said, in a certain sense, to express an occurrent belief in this situation (roughly): the occurrent belief that the answer this student is about to circle is incorrect. However, from the fact that a sentence serves to convey an occurrent belief that the speaker has in mind in a context--from the fact that in some sense or other (however familiar) it would be proper to say that a sentence expresses what a person is occurrently believing in a context--it does not follow that in our purely semantic sense, the sentence expresses that occurrent belief with respect to that context. There is, I think, a fairly familiar sense in which (9) may be used in certain situations to convey an occurrent belief. Still, although I am not confident about this point, I am inclined to say that the sentence does not express an occurrent belief with respect to such a situation, and that if anything is expressed with respect to a context by (9), in



the relevant semantic sense of 'express', then in that sense what we ought to say is that what is expressed is a question.<sup>5</sup>

In sum, there may cases of apparent type-switching in which, in virtue of a genuine semantic ambiguity of the sort suggested in connection with (8), an indicative (say) expresses something other than an occurrent belief with respect to a particular context. Then the amendments suggested by (T2a)\*\* will suffice to accommodate our intuitions about which thought is expressed. Otherwise, I am inclined to think that the appearance of type-switching arises, as, I think, in the case of (9), from the encroachment of some not-purely semantic notion of sentential expression--some concept that has to do essentially with what the speaker intends to convey, and is not determined (apart from the contribution of any indexical elements) by the rules governing strict and literal usage. But it is a purely semantic notion that has been my principal focus and that should be employed in testing (T2a)\* - c)\*.<sup>6</sup>

It might be maintained that (T2a)\* - c)\* (or amendments along the lines of (T2a)\*\*) do not express very substantial claims. Someone skeptical of any of the original clauses in our provisional formulation may be quite content to accept the present refinement as it stands, only because, so it might be claimed, the current versions of whichever original

clauses they did not like are vacuously true. "You claim" the skeptic says, "that for any interrogative [for example], if it expresses a thing of the type you're calling 'a question', it expresses a thing of that type with respect to every context; I heartily agree with that: no interrogatives ever express questions (if indeed there are such things)!"

Of course this is not the sort of acceptance one likes to get for one's cornerstone principles. If, in particular, (T2b)\* and c)\* are thus only vacuously true, we would not have a very interesting relationship established between non-indicatives and thoughts, nor much of an interesting answer (of any sort, partial or not) to the old question of what non-indicative sentences should be taken to express.

Consideration of cases of the sort produced at the start of this section, however, show that it is at least extremely natural, and prima-facie reasonable to hold that for each of the three grammatical moods, a vast number and wide variety of sentences of that mood do express thoughts of the relevant type. I think there is a plain sense in which it is correct to say that what the indicative

(6)            You are a noisy bird

expresses at a context is an occurrent belief, something possibly such that it is occurrently believed. It seems just as natural to me to say that the imperative

(1) Rachel, pick up Carl's violin

expresses a wish--a thing possibly such that someone is wishing it. Likewise, it seems quite natural to hold that the interrogative

(2) Will Carl have to pick up his violin?

expresses a question--a thing possibly such that someone is wondering it. And as I mentioned at the start, it's not as if such examples are isolated cases, due to some peculiarities of (1), (2) and (6). Relevantly similar examples may be readily multiplied by attending to any of a vast number of sentences of these three grammatical moods.

Perhaps then it is best to think of Thesis 2 as the conjunction of (T2a)\* - c)\* (or perhaps a\*\* - c)\*\*) with the following:

(T2\*) A vast number of indicatives express occurrent beliefs, a vast number of imperatives express wishes, and a vast number of interrogatives express questions.

From here on, then, when I refer to Thesis 2, strictly speaking, I shall mean the conjunction of (T2a)\* - c)\* and (T2\*) (or perhaps of (T2a)\*\* - c)\*\* and (T2\*).<sup>7</sup>

My principal claim here is that Thesis 2 formulates what ought to be seen as a very natural outlook, a starting perspective for addressing the question of what non-indicatives express that is at least prima-facie quite

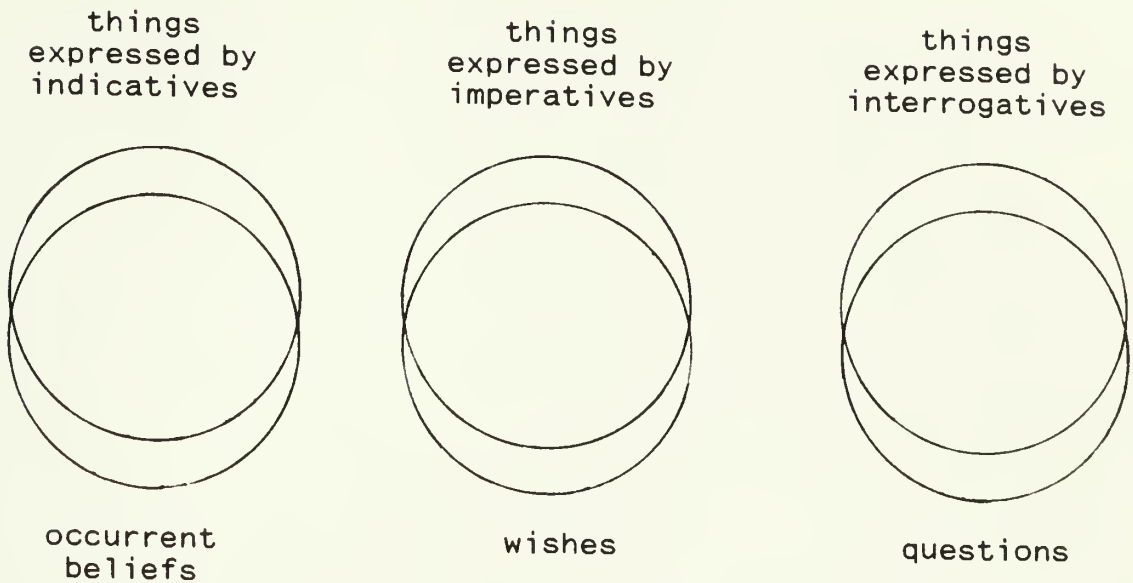
plausible, even though it has not been much attended to in discussions of that question.

That this outlook captured by Thesis 2 hasn't been widely shared is, I think, the result of a certain lacuna separating the attentions and concerns of writers taking one or the other of two rather different approaches in the philosophy of language. By and large, those who have been most concerned with the semantics of non-indicatives have not been among those concerned with a careful, systematic account of the nature of thoughts, or with the construction of semantic frameworks in which the notion of thought plays a central role. Most writers whose work may be placed under the banner of speech act theory seem, unfortunately, to fit this description. On the other hand, those who have been concerned with a systematic account of thoughts, and have appealed, centrally, to some concept of thought in their work in semantics have not been among those most concerned with the semantics for non-indicative sentences. Many semanticists, philosophically-minded logicians and logically-minded philosophers fall into this camp. What I wish to stress here is that absence of attention to the idea expressed by Thesis 2 does nothing to diminish its plausibility, which seems to me to be quite great.

### 6.2.3 Summary

The leading idea behind Thesis 2 is that a link exists between each of various sorts of sentence and one of several

types of thought. The idea may be depicted as follows:



Consider the leftmost intersecting pair: I believe there are indicatives that do not express occurrent beliefs (and perhaps some that do not express any thoughts at all), and there may be occurrent beliefs not expressed by any indicatives (nor by any other sentences, for that matter). The claim I wish to make is only that there is a substantial and significant overlap between those things expressed by indicatives and the things that can be occurrently believed, and I would make the same claim, mutatis mutandis, for the other intersecting pairs depicted in this diagram.

Before proceeding to the next chapter, a few last remarks are in order concerning the ideas that we have been discussing. In looking at things in the way suggested by the above diagram, are we, perhaps, suffering from triple

vision? Maybe if we got the situation into proper focus, we would find that we are looking at just one intersecting pair; let me explain.

I have spoken in preceding discussions of occurrent beliefs, wishes and questions as "types" of thought, suggesting (sometimes by outright assertion) that these types are not coextensive. Indeed, I am inclined to see wishes and questions as entirely disjoint, and to see each of these two types and that of occurrent beliefs as forming largely non-overlapping, if not disjoint, classes. (The view that these three types form disjoint classes is suggested by the diagram, but I do not commit myself to it.) This outlook is not required by Thesis 2 itself. Indeed, the view that these types are coextensive--in fact necessarily so--is a consequence of the third tenet of the Propositional Tradition (together with the assumption, (A6), accepted in Chapter 3, according to which non-occurrent attitudes and their principal counterparts share modal ranges).

According to the Propositional Tradition (modulo (A6)), there is a single category, that of propositions, any member of which is of the appropriate sort to be occurrently believed, to be wished, and to be wondered. In the next chapter, I shall present and discuss this particular consequence of the Propositional Tradition, and look at some considerations that might be proposed in support of it.

## NOTES TO CHAPTER 6

1. I have in mind here, especially, David Kaplan's work (see his [1989b]), but other writers, too, have supposed that thoughts are (or are among) the semantic values assigned to sentences. Salmon speaks of "information content", not "semantic value" (see his [1986]), but the same concept is intended, I think, and he takes the information contents of sentences to be the thoughts those sentences express. Soames takes this basic perspective for granted in his [1987a], though he uses "semantic contents".

2. I continue to use 'occurrent belief' in the way proposed in Chapter 3, as an abstract singular term denoting the principal occurrent counterpart of belief. The ambiguity in question here would attach to the use of the expression as a common noun.

3. The definitions here may be more restrictive than what some might think is called for by the concepts of belief, wish, and question; see the discussion of (D?) as a definition of "thought", section 1.5, p. 8.

4. The antecedent condition common to all of (T2a) - c), requiring that there be something expressed by the sentence at some context, is intended to rule out cases in which a sentence does not express anything at all (no matter the context). Sentences that might (for various reasons) be alleged to be cases in point would be:

The sentence immediately following the last occurrence of a colon is not true.

Don't let Santa Claus know that I've been naughty.

Does quadruplicity drink procrastination?

5. In this connection it is worth noting just one of the many difficulties I find there to be in figuring out what to say (9) expresses, in the purely semantic sense. One might hold that there is an interpretation available for (9) on which it expresses a belief, and not a question, if one takes the emphasis indicated by the underlining to have semantic import. Surely it is natural to interpret what a person means to convey by an utterance if he or she has stressed certain components differently than we would if no stress, or else different stress had been added. Compare (9) with

(9') Are you sure that you want to circle that answer?

The reader can imagine for him or herself a situation in which this emphasis is appropriate. Are different things conveyed by an utterance of (9) than by an utterance of (9')? Surely so. But it doesn't follow from this that the emphasis has a semantic import. Perhaps it is a device governed solely by pragmatic conventions concerning how a speaker may convey, and how listeners are to understand, what the speaker intends.

A central question to be asked, in determining whether emphasis is a semantic phenomenon of English, it seems to me, is this: is emphasis a device essential to proper English usage or merely an accidental feature of the way English is used? Isn't it possible that there be a community of language users who have a language exactly like current English in lexical and syntactic features, and whose use of the language is just like ours except that they do not use stress and lack any devices of emphasis? And if such situations are possible, couldn't it be that at least some such situations are ones in which the language of the community is English? For what it's worth, my own inclination is to say that there are such possible situations and that at least some of these are ones in which the language being used is current English--the people just don't use it like we do. If this is right, then I am inclined to infer that emphasis or stress is not a device that requires interpretation by a semantics of English, and that consequently, the presence of such devices in the utterance of a sentence of English doesn't affect what is expressed by that sentence, in the purely semantic sense. This line of reasoning is suggested by Kripke in his "Speaker's Reference and Semantic Reference" (Kripke [1977], see in particular, section (3c), p. 264 ff), although his concern there is with a different topic than that of the semantic interpretation of stress or emphasis.

6. Perhaps a preferable way to proceed here would be not to attend to grammatical moods (identified by particular syntactic form), associating types of thought with these, but rather to attend to kinds of uses of sentences, associating types of thought with these. Perhaps we can distinguish what we could call assertive, volitive and questioning uses. Then, whatever syntactic restrictions apply governing which of these various uses given sentences may be put to, we say that a thought of one of the relevant types is expressed by a sentence (of whatever syntactic type) relative to a context if the context is characterized by the appropriate, corresponding type of sentential use. We could have it that a sentence expresses an occurrent belief with respect to a context in which it receives an assertive use, while the same sentence expresses a question with respect to a context in which it receives a questioning use, and expresses a wish, with respect to a context in which it receives a volitive use. Or perhaps there might be



syntactic constraints placed on which of these types of use a given sentence could be put to: certain indicatives might serve as instruments for either assertive or volitive uses, but not for questioning uses; certain interrogatives might serve interrogative or volitive uses but not assertive ones.

On this proposal, we suppose there to be genuine cases of type-switching with such sentences as

- (6) You are going to pick up Carl's violin.
- (7) Are you sure you want to circle that answer?

but such cases will be accounted for by contextual variation acknowledged in the semantics. This is very rough, but perhaps a formulation appealing to these notions of assertive, imperative and interrogative uses, would afford a better way of capturing the basic idea behind Thesis 1.

I am not sure what to say about this proposal. Let me try to make the idea somewhat more definite. Let us suppose that whether a use of a sentence (in a context) is assertive, volitive or questioning, in the ways required, has to do with the intentions of the speaker of the context. In particular, say that a use is assertive, volitive or questioning if and only if, respectively, the speaker intends to express a belief, a wish, a question by that use. The present proposal, then, has it that such intentions will be semantically relevant in determining what thought a sentence expresses--in the purely semantic sense--with respect to a context.

There seems to me to be a difficulty with this proposal. Plainly the following thesis is not acceptable: a sentence expresses (in the purely semantic sense) a thought of a certain kind with respect to a context if the speaker intends to express a thought of that kind by his or her use of the sentence in that context. To see that this is unacceptable, consider the intentions of incompetent speakers, or the intentions of sarcastic speakers, etc. Thus, not just any old intention you may have as regards what sort of thing you are expressing will be relevant in determining what sort of thing you are expressing--in the purely semantic sense. But then there should be some reason given by advocates of the present proposal why a speaker's intentions to express a belief, wish or question--those intentions that determine whether a use of a sentence is assertive, volitive or questioning--are semantically relevant in determining what is in fact expressed. Why should this one particular class of intentions have semantic import when other intentions, seemingly of the same general kind, have only pragmatic relevance (if any relevance at all)? I do not see what plausible explanation could be given on this point.

7. Can't we be more specific than (T2a)\* - c)\*; can't more be said as to which thought it is that a given sentence expresses? I am inclined to think so. Consider the case of indicatives. I am inclined to accept a claim to the effect that for any indicative,  $\emptyset$ , satisfying the antecedent of (T2a)\*,  $\emptyset$  expresses the occurrent belief that  $\emptyset$ . Let us consider, briefly, how we might make such a claim more precise.

What is wanted is a claim roughly to the effect: if  $\emptyset$  is an indicative, and  $\emptyset$  expresses an item,  $x$ , then if a person is occurrently believing  $x$ , that person is occurrently believing that  $\emptyset$ . That is the basic idea; it is very roughly put, and not exactly right. The following metalinguistic formulation expresses the claim I want as precisely as I have been able to manage:

(T2a)+ For any indicative,  $\emptyset$ , if the sentence

[  $\exists x \exists c$  ( ' $\emptyset$ ' expresses  $x$  wrt  $c$  & nec  $\forall y$  (  $y$  is occurrently believing  $x \rightarrow y$  is occurrently believing that  $\emptyset$  ) ) ],

expresses something with respect to a context,  $c'$ , then what it expresses with respect to  $c'$  is (in fact) true.

To get a better grasp of what this claim comes to, and what it adds when conjoined to (T2a)\*, consider a particular consequence: say, with 'You are quiet' for  $\emptyset$ . (T2a)+ implies that, with respect to any context, if the following sentence expresses something, it expresses something true:

(a)  $\exists x \exists c$  ( 'You are quiet' expresses  $x$  wrt  $c$  & nec  $\forall y$  (  $y$  is occurrently believing  $x \rightarrow y$  is occurrently believing that you are quiet ) )

Suppose that (a) does express something with respect to a context,  $c_a$ . Then there is an addressee for the involved use of 'you'; suppose this is Henry. Then what (a) says, in effect, is that there is some context with respect to which 'you are quiet' expresses a thought necessarily such that if a person is occurrently believing it, the person is occurrently believing that Henry is quiet. Surely this is the case. I assume that there is a context in which 'you are quiet' is addressed to our fellow, Henry. Then, with respect to that context, 'you are quiet' expresses just such a thought: intuitively, the thought that Henry is quiet. I take it, then, that (a) expresses a truth with respect to  $c_a$ . Since selection of  $c_a$  was arbitrary, we have our particular consequence of (T2a)+.

I think that the conjunction of (T2a)+ and (T2a)\* approximates reasonably well the idea that for any appropriate indicative,  $\emptyset$ ,  $\emptyset$  expresses the occurrent belief that  $\emptyset$ . I am inclined to think that the conjunction is true, and that analogous strengthenings of (T2b)\* and c)\*

hold as well. (Roughly, these strengthenings may be put as follows. (T2b)+: if  $\emptyset$  is an imperative (with no subject term), and  $\emptyset$  expresses an item x, with respect to a context in which you are the addressee, then necessarily if a person is wishing x, that person is wishing you would  $\emptyset$ . (T2c)+: if  $\emptyset$  is an interrogative whose indicative counterpart is  $\emptyset^*$ , and  $\emptyset$  expresses an item x, then necessarily, if a person is wondering x, that person is wondering whether  $\emptyset^*$ .)

An objection may be raised to (T2a)+, however. Consider

Hesperus is visible in the evening

This sentence expresses a certain thought, call it "H". But, one might claim, it is not necessarily the case that if a person is occurrently believing H, the person is occurrently believing that Hesperus is visible in the evening. Perhaps one would claim this if one thought that an ascription of the form

t is occurrently believing that  $\emptyset$ .

does not merely imply that the subject (the denotation of the substituent of 't') is occurrently believing the thought expressed by the embedded sentence. Such an ascription, the idea might be, also implies something about the way in which the subject grasps the thought expressed by  $\emptyset$ , something about the manner in which the subject is thinking this thought. With such a view, one might claim that it is possible for a person, say Henry, to be occurrently believing H and yet not occurrently believing it in the manner implied by

Henry is occurrently believing that Hesperus is visible in the evening.

Perhaps Henry is occurrently believing H, rather, in the manner implied by

Henry is occurrently believing that Venus is visible in the evening.

If such an outlook is correct then (T2a)+ would have to be rejected, for the thesis would have a false implication, namely, that with respect to any context, if the following expresses something, it expresses a truth,

$\exists x \exists c$  ( 'Hesperus is visible in the evening' expresses x wrt c & nec  $\forall y$  ( y is occurrently believing x  $\rightarrow$  y is occurrently believing that Hesperus is visible in the evening ) ).

We may assume that there is a context with respect to which

this sentence expresses something--the same thing, we may assume, with respect to every context. What is expressed, briefly, is that the thought expressed by 'Hesperus is visible in the evening' is necessarily such that if a person occurrently believes it, he or she occurrently believes that Hesperus is visible in the evening. But this is precisely what the outlook in question denies. Thus, if we accept this outlook, we must reject (T2a)+. And plainly, this outlook would also require rejection of the analogous strengthenings of (T2b)\* and c)\* alluded to before.

I do not have a settled opinion on these matters, and propose just to suspend judgment on (T2a)+ (and analogous strengthenings of (T2b)\* and c)\*).



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WHAT ARE THOUGHTS?

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## CHAPTER 7

### THE RECEIVED VIEW

It seems natural to say one believes a proposition and unnatural to say one desires a proposition, but as a matter of fact that is only a prejudice. What you believe and what you desire are of exactly the same nature.

Russell<sup>1</sup>

#### 7.1 The Propositional Tradition, Again

At the end of Chapter 2, I cited four roles that thoughts are standardly supposed to serve, roles that, as I see it, should be accommodated by any acceptable account of the nature of thoughts:

1. The Intentional Role  
Thoughts make up the modal ranges of intentional attitudes.
2. The Logical Role  
Thoughts exemplify logical properties, and are terms of logical relations and operations
3. The Linguistic Role  
Thoughts are the things expressed by sentences
4. The Semantic Role  
The semantic properties of and relations among sentences can be accounted for by appeal to corresponding properties of and relations among the thoughts expressed by those sentences.

Given that this is the standard conception, one might well suppose that an investigation of the nature of thoughts should be considered an important project in the philosophy of logic and of language. But this is not precisely a



project that most who work in these fields have taken upon themselves, at least, not as I see it. Rather, since the turn of the century, almost without exception, philosophers of logic and of language have restricted their attention instead to an investigation of the nature of propositions. I use this term in the sense proposed in Chapter 2, according to:

(D2)         $x$  is a **proposition** =df  $x$  is a thought, and  $x$  is either true or false.<sup>2</sup>

This practice of restricting attention to propositions is characteristic of the tradition discussed in Chapter 2; what I called there the "Propositional Tradition". It is characteristic of this tradition to suppose that propositions, and only propositions, play the four roles cited above.

Of course it begs the question against the Propositional Tradition to claim, without further argument, that there is any restriction of attention involved in their attending to propositions when thoughts are at issue; for according to that tradition, thoughts just are propositions. Still it is coherent to ask whether the proponents of this tradition are right about this identification. And in this connection, it is important to separate the view of the Propositional Tradition on this matter from the one that has served as the starting position of the present study, which is that the entities that perform roles 1) - 4) are

thoughts, in the sense of 'thought' governed by Thesis 1:

Thesis 1

$\text{nec } \forall x( \text{pos } \exists y( y \text{ is } \text{gen}^n \text{thinking } x ) \rightarrow x \text{ is a thought } )$

It is not clear whether the concept of proposition employed by proponents of the Propositional Tradition may be defined according to (D2), if it is understood that this notion of thought is the one involved in the definiens. For the time being I shall assume that this is the case. This matter of interpretation is significant (as I suggested in Chapter 2, see section 2.2.2 The Nature of the Dispute), and I shall return to examine it more carefully in the next chapter.

## 7.2 The Received View

There is a certain perspective distinctive of the Propositional Tradition that I have not discussed yet, but which underlies all three of the tenets of that tradition that were formulated in Chapter 2. I shall refer to this perspective as "the Received View". The Received View concerns the nature of the "objects" of intentional attitudes, and has to do, more specifically, with which things a person may be said to bear those attitudes to under given conditions. One consequence of the view is that the "objects" of all attitudes are propositions. This consequence was formulated in (PT2). Another consequence of the Received View is that, in the case of quite many intentional attitudes, the "objects" of any one of them will

be precisely the objects of any other--the attitudes in question have the very same modal range. A restricted version of this consequence, concerning the attitudes of belief, desire and wondering, was captured in (PT3). (Both (PT2) and (PT3) will be restated shortly, in 7.2.1.) But the Received View would have it that a host of other attitudes have the same modal range as the three of concern in (PT3).

It is remarkable how commonly The Received View--or some consequence of it--is simply taken for granted. And we shall see that there are some good reasons why this view has been so widely accepted. Nevertheless, I believe that if we reflect on certain facts about the concepts of generic thinking and of sentential expression, intuitive considerations arise that call the Received View, and consequently the Propositional Tradition, into question. I shall present and discuss these considerations in the following chapter.

In the present chapter, I propose to formulate two principles that jointly constitute the Received View's pronouncement concerning the attitudes of occurrent belief, wishing and occurrent wondering. One of these two principles, (RV1), is a consequence of (PT2), (PT3) and one further assumption that was attributed to the Propositional Tradition earlier. The second thesis, (RV2), is independent of any tenets or assumptions of the tradition formulated so

far. I think it is safe to say, however, that this second principle would be counted a firm commitment by any follower of the Propositional Tradition. I shall discuss these two principles in turn.

### 7.2.1 (RV1)

In Chapter 2, I noted that the following tenets of the Propositional Tradition distinguish it from the alternative that I wish to propose:

(PT2)  $\forall R$ ( if R is an intentional attitude, then  
 $\text{nec } \forall x$ (  $\text{pos}(\exists y R(y,x))$  only if x is a  
 proposition ))

(PT3)  $\forall R$ ( if R is an intentional attitude, then  
 i)  $\text{nec } \forall x$ (  $\text{pos}(\exists y R(y,x))$  only if  
 $\text{pos}(\exists y( y \text{ believes } x ))$ )  
 ii)  $\text{nec } \forall x$ (  $\text{pos}(\exists y R(y,x))$  only if  
 $\text{pos}(\exists y( y \text{ desires } x ))$ )  
 iii)  $\text{nec } \forall x$ (  $\text{pos}(\exists y R(y,x))$  only if  
 $\text{pos}(\exists y( y \text{ wonders } x ))$ ))

It is a consequence of (PT2) that the "objects" of belief are propositions:

(1)  $\text{nec } \forall x$ (  $\text{pos } \exists y( y \text{ believes } x )$  only if x is a  
 proposition )

And it is a consequence of (PT3) that the attitudes of belief, desire and wondering have the same modal ranges; this is captured by the following two formulations:

(2)  $\text{nec } \forall x$ (  $\text{pos } \exists y( y \text{ believes } x )$  iff  
 $\text{pos } \exists y( y \text{ desires } x )$  )

(3)  $\text{nec } \forall x$ (  $\text{pos } \exists y( y \text{ believes } x )$  iff  
 $\text{pos } \exists y( y \text{ wonders } x )$  )

I think that the conjunction of (1) and (2) is a fair formulation of the outlook Russell was promoting in the remarks quoted at the start of this chapter. I see the influence of the Received View in those remarks. And although Russell only cited the cases of desire and belief there, I suspect he would have had similar things to say concerning the relationship between belief and wondering. I believe he would have said (to paraphrase him): it may seem unnatural to say that one wonders a proposition, but as a matter of fact, that is only a prejudice; what we believe and what we wonder are of exactly the same nature.<sup>3</sup>

Now recall that in Chapter 3, we made an assumption, (A6), implying that each of the three non-occurrent attitudes of belief, desire and wondering has the same modal range as its principal occurrent counterpart. I believe that this assumption would be accepted by and large within the Propositional Tradition as well. From (1) - (3) and (A6), we get:

(1')  $\text{nec } \forall x( \text{pos } \exists y( y \text{ is occurrently believing } x ) \rightarrow$   
 $\qquad\qquad\qquad x \text{ is a proposition } )$

(2')  $\text{nec } \forall x( \text{pos } \exists y( y \text{ is occurrently believing } x ) \text{ iff}$   
 $\qquad\qquad\qquad \text{pos } \exists y( y \text{ is wishing } x ) )$

(3')  $\text{nec } \forall x( \text{pos } \exists y( y \text{ is occurrently believing } x ) \text{ iff}$   
 $\qquad\qquad\qquad \text{pos } \exists y( y \text{ is wondering } x ) )$

The conjunction of these three is equivalent to the first component principle of our version of the Received View:

(1') - (3') jointly imply that the three occurrent attitudes at issue have the very same modal range, and that this common modal range is made up exclusively of propositions. If we apply the definition of "occurrent belief" "wish" and "question" provided in the preceding chapter (see (D8), Chapter 6, p.7), we can simplify:

- (RV1) a. nec  $\forall x$ ( if x is an occurrent belief, then x is a proposition )  
 b. nec  $\forall x$ ( x is an occurrent belief iff x is a wish )  
 c. nec  $\forall x$ ( x is an occurrent belief iff x is a question )

This shall be our formulation of the first component principle of the version of the Received View that I shall be examining in what follows.

### 7.2.2 (RV2)

The second component principle of the Received View has to do with which proposition it is that we may be said to be occurrently believing, wishing or wondering, as the case may be, when given ascriptions of occurrent belief, wishing or occurrent wondering are true of us. To get an idea of what this second principle asserts, let me begin by considering how it applies to a particular case; then we shall consider how to generalize from the example.

Suppose that A is occurrently believing that Jones will arrive on time, that B is wishing that Jones would arrive on time, and that C is wondering whether Jones will arrive on time. There is a particular proposition such that our

second principle, given only these assumptions, entails that A is occurrently believing that proposition, B is wishing it, and C is wondering it. The proposition in question is the one we would normally take ourselves to be referring to when we speak of 'the proposition that Jones will arrive on time', having some particular Jones in mind.<sup>4</sup>

Before attempting to formulate a suitable generalization, it will be helpful to have some further terminology. Let us say that a sentence is context-sensitive just in case it does not express the same thought from context to context. If an indicative is not context-sensitive and moreover, the thought it expresses is true or false (i.e., a proposition), I shall say that the indicative is "standard"; thus:

(D9)  $\emptyset$  is standard =df  $\emptyset$  is an indicative;  $\emptyset$  is not context-sensitive &  $\exists c \exists x$  (  $\emptyset$  expresses x wrt c & x is a proposition )

I believe that very many indicatives are not context-sensitive, and moreover, that among indicatives that are not context-sensitive, very many are standard in the present sense. (It is controversial whether these sentences are quite so common as I am here making out.<sup>5</sup> So it might be claimed that "standard" is a misleading choice of phrase, but I have not been able to think of a better term for sentences that are not only context-insensitive, but such that the things they express are truth-valued.)

We are interested in generalizing the claim above concerning conditions under which persons may be said to be occurrently believing, wishing or wondering the proposition that Jones will arrive on time. The generalization should assert, to put it loosely, that for every standard indicative,  $\emptyset$ , the item we speak of as "the proposition that  $\emptyset$ " is necessarily such that someone is occurrently believing it, wishing it or wondering it, respectively, if he or she is occurrently believing that  $\emptyset$ , wishing it would be that  $\emptyset$  or wondering whether  $\emptyset$ . So instances of this generalization will involve proposition-denoting terms of the form

the proposition that  $\emptyset$

where  $\emptyset$  is a sentence. Before formulating the relevant generalization, then, let me try to make the relevant use of this last bit of terminology clear. I propose to adopt the following:

(D10) For any indicative,  $\emptyset$ , we shall take

[the proposition that  $\emptyset$ ]

to be a singular term i) rigidly designating the thing satisfying the following open sentence (for 'x'):

[ $\exists c$ ( ' $\emptyset$ ' expresses x wrt c; x is a proposition  
and  
 $\forall c' \forall y$ ( ' $\emptyset$ ' expresses y wrt c' iff y = x )) ]

if there is such a thing, and ii) designating nothing otherwise.

Note that the following holds:



(4) If  $\emptyset$  is standard, then there is a thing uniquely satisfying the open sentence (for 'x'),

[ $\exists c$ ( ' $\emptyset$ ' expresses x wrt c; x is a proposition  
and  
 $\forall c' \forall y$ ( ' $\emptyset$ ' expresses y wrt c' iff  $y = x$  )) ]

For suppose S is standard. Then there is a unique thought that it expresses from context to context; moreover, this thought is a proposition. So there is a proposition uniquely such that it is expressed by S at any context. This thought satisfies the above square-braced open sentence when S is the substituend for ' $\emptyset$ '. From (4) and (D10), it follows that [the proposition that  $\emptyset$ ] rigidly designates a proposition, provided that  $\emptyset$  is standard.

With this terminology set, the second component principle of the Received View may be put:

(RV2) for any standard  $\emptyset$ , the following expresses a truth (at any context):

[ a) nec(  $\forall x$ ( x is occurrently believing that  $\emptyset \rightarrow$  x is occurrently believing the proposition that  $\emptyset$  ) )  
b) nec(  $\forall x$ ( x is wishing that it would be the case that  $\emptyset \rightarrow$  x is wishing the proposition that  $\emptyset$  ) )  
c) nec(  $\forall x$ ( x is wondering whether  $\emptyset \rightarrow$  x is wondering the proposition that  $\emptyset$  ) ) ]

I assume that 'Jones will arrive on time' is standard.<sup>6</sup>

Then (RV2) implies that if persons, A, B, and C, are such that A is occurrently believing that Jones will arrive on time, B is wishing that it would be the case that Jones will arrive on time, and C is wondering whether Jones will arrive

on time, then there is at least one thing, the proposition that Jones will arrive on time, such that A is occurrently believing it, B is wishing it, and C is wondering it. This is the result we wished to generalize.

(RV2) implies that the proposition that Jones will arrive on time, call it "PJ" for short, is one thing I am occurrently believing, wishing, or wondering, if I am, respectively, occurrently believing that Jones will arrive on time, wishing that he would or wondering whether he will. Can't we identify PJ, simply, as what I am occurrently believing, wishing or wondering under these conditions? But this would imply that there is a unique thought such that, say, my occurrently believing that Jones will arrive on time is a sufficient condition for my occurrently believing it. It is not clear that this is correct. I warned the reader at the end of Chapter 4 that the Plurality of Thoughts Argument (PTA) would bother us again (see Chapter 4, section 4.8). Here is a case in point. An analogue of PTA leads to the conclusion that there are rather at least two thoughts each such that my occurrently believing that Jones will arrive on time is a sufficient condition for my occurrently believing it; intuitively, two such thoughts would be: the thought that Jones will arrive on time, and the thought that Jones will arrive.<sup>7</sup> I find PTA itself fairly compelling; its analogue in the present case is surely just as compelling. If we aim at least to suspend judgment on the soundness of PTA, then I think we ought not commit ourselves

to the claim that PJ is uniquely such that one's occurrently believing that Jones will arrive on time is a sufficient condition for occurrently believing it.

The conjunction of (RV1) and (RV2) shall serve as our formulation of the Received View in what follows.<sup>8</sup> Let us turn to consider what grounds there might be for accepting this doctrine.

### 7.3 Motivation for the Received View

It is not surprising that the Received View has enjoyed widespread acceptance; there are certainly some considerations that lend it prima-facie credibility. The considerations I have in mind may be separated into three groups.

#### 7.3.1 A Semantic Rule for Sentential Complements

In connection with PTA, we considered a semantic rule that one might suppose governs the behavior of indicative clauses in certain constructions (see Chapter 4, section 4.8, discussion of (A?), p.75 and ff.). Although this rule is independent of principles embodied in the Received View, it is nevertheless a very natural accompaniment to that view. The rule asserts that indicative clauses, when they figure as complements in ascriptions of the form

(F1)        t is thinking that  $\emptyset$ ,

are rigid designators. The rule didn't pronounce on what things are rigidly designated by indicative clauses in these contexts, but I suggested that one might suppose that a given clause [that  $\emptyset$ ], for appropriate  $\emptyset$ , rigidly designates the thought we refer to by the phrase

the thought that  $\emptyset$ .

Let us consider a related thesis:

- (R) If  $\emptyset$  is standard,  $t$  is an appropriate singular term, and  $V$  is the appropriate form of an attitude verb (or verb phrase) taking indicative clauses as complements, then the following expresses a truth:

[the occurrence of 'that  $\emptyset$ ' in ' $t$   $V$  that  $\emptyset$ ' rigidly designates the proposition that  $\emptyset$ ]

Roughly speaking, the idea is that, in the relevant contexts and for suitable  $\emptyset$ , the indicative clause, [that  $\emptyset$ ], rigidly designates the proposition that  $\emptyset$ . I think this is a plausible idea.<sup>9,10</sup>

(R) entails the first clause of (RV2). For according to (R), if  $\emptyset$  is standard, then the occurrence of [that  $\emptyset$ ] in the open sentence:

[ $x$  is occurrently believing that  $\emptyset$ ]

rigidly designates the same proposition designated by [the proposition that  $\emptyset$ ]. From this fact, we can establish the truth of:

nec(  $\forall x$ (  $x$  is occurrently believing that  $\emptyset \rightarrow x$  is occurrently believing the proposition that  $\emptyset$  ) )

for any standard  $\emptyset$ . And if we instantiate (RV2), for any standard  $\emptyset$ , this is precisely what we get in clause a) of the result. Then if one finds (R) plausible, one ought to find that what (RV2) implies concerning occurrent belief is plausible too.

However, (R) as it stands does not guarantee what is required by the last two clauses of (RV2): that for any standard  $\emptyset$ , the proposition that  $\emptyset$  is necessarily such that a person is wishing it or wondering it, if he or she is, respectively, wishing that it would be that  $\emptyset$  or wondering whether  $\emptyset$ . In any (grammatical, English) ascription formed from 'is wishing', the complement clause will not have an indicative main verb; the main verb of the complement clauses in such ascriptions will either be in the subjunctive or else be formed from one of the modal auxiliaries, 'could', 'would' or 'might'. Indicative clauses (that-clauses formed with indicatives) cannot figure as complements of the present progressive of 'wonder' either. Consequently, (R) does not imply either clause b) or c) of any instantiation of (RV2), for given standard  $\emptyset$ .

Still it may seem a natural step from (R) to suppose that what (R) says about indicative clauses may be said, mutatis mutandis, of any sentential clauses that figure as complements of attitude verbs. Thus, we could adopt the following:

(R\*) If  $\emptyset$  is standard, t is a singular term, and V is the appropriate inflection of an intentional attitude verb (or verb phrase) taking sentential clauses as complements, then where S-clause is a grammatically appropriate sentential clause obtained from  $\emptyset$ , the following expresses a truth:

[The occurrence of 'S-clause' in 't V S-clause' rigidly designates the proposition that  $\emptyset$ ]

(R\*) implies each clause of (RV2), and it proposes a simple and uniform treatment of the sentential complements figuring in many and various attitude ascriptions: those to which (R) applies--including ascriptions formed with the verbs 'thinks', 'is occurrently believing', 'hopes' 'doubts', 'knows', 'asserts', etc.--but as well to a host of other sorts of attitude ascriptions, including any having the following as their main verb phrases: 'wishes', 'is wishing', 'desires', 'is adamant', 'wonders', 'guesses', 'is trying to think', etc.

(R\*) is a very simple and general rule. This fact by itself does not constitute grounds for accepting any of its consequences. However, if other considerations provide independent motivation for accepting (RV2), the fact that it is the view required by such an attractively simple and general semantic thesis may well add to (RV2)'s appeal.

### 7.3.2 What is Occurrently Believed (etc.) to be the Case

The following possibility might be noted: that one and the same thing is such that one person is occurrently believing that it is the case, some other person is wishing that it were the case and yet another is wondering whether

it is the case. One might suppose that such a possibility is realized, for example, under the following circumstances: Jones is thinking that Bush is honest; Sarah knows he isn't, but wishes he were, and William has always thought that Bush was honest, but has now come to have some doubts; at this very moment, in fact, he is wondering whether Bush is honest. And one might suppose that in this case, one thing such that--i) Jones is occurrently believing it is the case, ii) Sarah is wishing that it were the case, and iii) William is wondering whether it is the case--is a thing such that i) Jones is occurrently believing it, ii) Sarah is wishing it, and iii) William is wondering it. Then we would have it that one and the same thing is an occurrent belief, a wish and a question.

And plainly the point here is not limited to thoughts concerning Bush's honesty; it is plausible to suppose that a relevantly similar claim could be made concerning anything one is thinking when one may be said to be occurrently believing that something is the case, wishing that it would be the case or wondering whether it is the case. Indeed it is natural to think that anytime one is occurrently believing anything at all, there is something one is thereby occurrently believing to be the case and this thing is also such that one could wish that it would be the case and also wonder whether it is the case. This in turn might naturally be taken to show that anything that can be occurrently

believed is a thing that could be wished and as well a thing that could be wondered. Similar considerations suggest that anything that can be wished can be occurrently believed and wondered, and that anything that can be wondered can be occurrently believed and wished. Thus, an important part of the Received View would be secured concerning occurrent beliefs, wishes and questions: these three sorts of thought are in fact coextensive.

This point, by itself, does not show that occurrent beliefs, wishes and questions are all propositions. But if there is adequate reason to suppose that any of these types have propositions as their instances, the above line of consideration apparently supports the view that all three types do. Coupled, then, with adequate reason to think that any one of these sorts of thought are propositions, the present considerations may be viewed as affording direct support for (RV1). And, indeed, the claim that occurrent beliefs may be identified with propositions has substantial plausibility; I shall discuss this matter in 7.3.5 below.

There are considerations which tend to confirm the Received View having to do with that view's passing some tests of adequacy to which any account of the nature of thoughts should be submitted. I will mention two such tests; I think it should be fairly clear that our restricted version of the Received View passes each of these.



### 7.3.3 Test 1: Thoughts Can Be Shared

Thoughts are things that can be shared, had in common. For example, it is possible for you and me both to be occurrently believing that President Bush is an honest man. In such circumstances it will be correct to say that you and I are thinking the same thing: we share a thought. Parallel remarks apply concerning shared wishes and questions. If you and I are both wishing that Bush were honest or both wondering whether he is, either way, it would be correct to say that we are thinking the same thing; again, we share a thought. If a theory identified certain items as thoughts--as occurrent beliefs, wishes and questions--and those items couldn't correctly be said, in the present sense, to be shared under such circumstances, then the theory just doesn't afford an acceptable conception of thoughts.

The test could be put this way: if an account of the nature of thoughts is adequate, it ought to capture faithfully our intuitive judgments concerning occasions with respect to which we would be inclined to say that persons are having the same thought--the theory ought to imply that there is a shared thought with respect to most cases concerning which our intuitions say there is a shared thought.

(RV2) meets this requirement. It implies, for example, that any circumstances in which you and I are both occurrently believing that Bush is honest are circumstances

in which there is a thing--the proposition that Bush is honest--that you and I are occurrently believing. The thesis guarantees that if I am wondering whether Bush is honest and you are wondering whether Bush is honest then there is a thing--again, the proposition that Bush is honest--that both of us are wondering. Then as long as the proponent of the Received View uses 'thought' so that it applies to such "objects" of attitudes, that proponent will have the desired result that thoughts can indeed be shared.

Plainly, (RV2) does not apply to all cases in which we would want to say that there is a shared thought. It can only predict shared thoughts with respect to cases in which our thinking may be reported by instances of

(F1) t is occurrently believing that  $\emptyset$

(F2) t is wishing that it would be that  $\emptyset$

or

(F3) t is wondering whether  $\emptyset$

in which the substituends for ' $\emptyset$ ' are standard. But within this limited range (RV2) may seem to capture our intuitions exactly. A fully general formulation of the Received View could be expected to capture our intuitions in this matter with respect to an even broader class of cases (on this point, see Note 8).

The present test does not require that the items that can be commonly occurrently believed, wished and wondered

will be of any particular sort; it only requires, regarding cases concerning which we would intuitively say that there is a shared thought, that the theory (by and large) says so too.

It may be noted that this test does not weed out unreasonable theories. It is passed for example by a theory according to which the only thought in the world is some particular telephone pole in Pocatello Idaho, and everybody is always "having" it. So, passing the present test is not in itself much of a recommendation of a theory; nevertheless, the test places a necessary condition on adequacy for theories about the nature of thoughts, and it is a test that our version of the Received View passes.

#### 7.3.4 Test 2: Identifying Occurrent Beliefs with Propositions.

A second test of adequacy for any account of the nature of thoughts concerns the relationship proposed between occurrent beliefs and propositions. The proposal of the Received View in this connection is afforded by the a)-clauses of (RV1) and (RV2), by which I mean the following:

(RV1a) Necessarily, for any  $x$ , if  $x$  is an occurrent belief only if  $x$  is a proposition.

(RV2a) For any standard  $\emptyset$ , the following expresses a truth:

[nec(  $\forall x$ (  $x$  is occurrently believing that  $\emptyset \rightarrow x$  is occurrently believing the proposition that  $\emptyset$  ))]

Consider (RV1a). I think it is plain that of the many and

various cases in which a person could be said to be occurrently believing something, a vast number of such cases are ones concerning which we would say that whatever the person is occurrently believing is a true or false thought, hence a proposition. I also take it that if a thought is true or false, and is in the modal range of any intentional attitude at all, then we would be inclined to say that this thought is at least possibly in the modal range of occurrent belief, and so, is an occurrent belief. These observations afford some support for, and make it very natural to accept the idea that the modal range of occurrent belief is made up exclusively of propositions, as required by (RV1a).<sup>12</sup>

There is also some presumption in favor of (RV2a). Take the indicative, 'Henry is a noisy bird', for example. It is standard (in my idiolect at least; Henry is our pet cockatiel). It is not implausible to hold that, necessarily, if a person is occurrently believing that Henry is a noisy bird, one thing the person is, then, occurrently believing is the thing that is in fact expressed by this sentence. Consider any possible situation in which a person is occurrently believing of our Henry that he is a noisy bird. Isn't it correct to say, concerning such a situation, that what we express by our use of 'Henry is a noisy bird' is something this person is occurrently believing in that situation? I think so. If I am right, then so is the instantiation of (RV2a) for this particular sentence.

Similar considerations support the consequences of (RV2a) concerning other standard sentences.

We should expect an acceptable account of the nature of thoughts to predict at least that a vast number and wide variety of occurrent beliefs are propositions. Also, I think we should expect any viable account to predict that when one's occurrent believing is properly reported by the ascription

[t is occurrently believing that  $\emptyset$ ]

for some standard indicative,  $\emptyset$ , the proposition we would refer to as [the proposition that  $\emptyset$ ] will be among the things that one is then occurrently believing. Plainly, (RV1a) and (RV2a) meet these expectations.

#### 7.4 Summary

In the next chapter, I shall discuss grounds for questioning the Received View. My focus will be on (RV2) but I think it will become clear enough that if there is reason to question that component of the view, there is reason as well to question (RV1). In turn, these considerations provide motivation for considering some alternative to the Propositional Tradition that does not commit itself to the Received View (or to the conjunction of (PT2) and (PT3)). In Chapter 9, I propose such an alternative. However, any viable alternative to the

Propositional Tradition that eschews the Received View ought to accommodate the considerations raised in the previous section.

This accommodation can be furnished in various ways. It seems clear that any account of the nature of thoughts ought to pass the two tests of adequacy discussed in 7.3.3 and 7.3.4. But in the case of the considerations raised in 7.3.1 and 7.3.2, there is some leeway. Concerning either of the latter two groups of considerations, if we are supporting some alternative to the Propositional Tradition that rejects the Received View, we ought to show either i) that the considerations do not really offer support for the Received View, contrary to appearances, or ii) that they support the proposed alternative just as well. In any case, we ought to be able to show that whatever real support these considerations provide for the Received View is, one way or another, counterbalanced by benefits derived from accepting the alternative. Since I shall be proposing an alternative view of the sort in question here, I shall have to address these matters sooner or later.

To conclude this chapter, let me mention a further reason why the Received View may strike one as such a natural view to accept. Virtually everybody (whether philosopher or philosophically-oriented linguist or logician) has been brought up within the Propositional Tradition. Within that tradition, research concerning so-

called propositional attitudes has been dominated by the Received View. Consequently, the problems and projects that have arisen within this research have been largely those having to do with the analysis of belief or, on the semantic side, with proper treatment of belief ascriptions. For the Received View leads one to suppose that in looking at the "objects" of belief, one is looking at the very things that are objects of all the other attitudes.

I do not deny that there are problems to be faced concerning intentional attitudes and attitude ascriptions, generally, that can be addressed by restricting one's attention to belief and belief ascriptions. Nevertheless, with the focus of research directed so exclusively to problems parochial to the study of belief (or to the study of the semantics of belief ascriptions), it is not surprising that one does not come across much evidence contravening the claim that all intentional attitudes are relations we bear to propositions, or contravening the claim that other attitudes (desire and wondering, and their occurrent counterparts, for example) have the very same modal range as belief.

Under these circumstances, then, it is not so surprising that the Received View continues to enjoy widespread acceptance.<sup>13</sup> But of course these circumstances, though making acceptance of the view quite natural and something to be expected, don't constitute good grounds for

accepting it. I wish to turn now to discuss some matters that I think call the Received View into question.



## NOTES TO CHAPTER 7

1. Russell in his "Philosophy of Logical Atomism", Russell [1956], p.218

2. Perhaps some would accept a stronger definiens, requiring that propositions be necessarily true or false. Perhaps some would claim that the present definiens is too strong, and that it should only be required that propositions are possibly true or false. Surely some link to truth-valuedness along these lines would be required. The present formulation will suffice and is most convenient for purposes of exposition here.

3. It should be noted, however, that Russell goes on, in this very essay, to promote what is called the "multiple relation" account, according to which it is denied that propositions are the objects of the attitudes. Since this essay is a compilation of a series of lectures that Russell gave over a period of many weeks, it is possible that he adhered to the propositional account at the point in the course of his lectures where this passage occurs. It is also possible that he was appealing to the propositional account as a simplifying picture, at this point, just to get across the view--common to both the multiple relation and the propositional accounts--that all the attitudes should be accounted for in a uniform way.

4. There is a question here that I have not addressed, and for which I have simply assumed an answer: which propositions are such that, according to the Received View, it follows from the fact that a person is wishing that Jones would arrive on time, that the person is wishing those propositions? Take the case just cited in the text. I am assuming that according to the second component of the Received View now in question, it follows from B's wishing that Jones would arrive on time, that B is wishing a proposition, x, which in turn is such that from A's occurrently believing that Jones will arrive on time, it follows that A is occurrently believing x. One such proposition is, I claimed, the proposition that Jones will arrive on time.

The case of occurrent belief is not at issue here. I think it would be agreed by all that the proposition that Jones will arrive on time is a proposition, x, such that it follows, from A's occurrently believing that Jones will arrive on time, that A is occurrently believing x (more on this in section 7.3.5). What is not clear is whether this proposition--the proposition that Jones will arrive on time--is also such that, from B's wishing that Jones would arrive on time, it follows that B is wishing it. Just to give some

idea of the problem, here are some other possibilities: perhaps what B is wishing is rather the proposition that Jones is arriving on time, or the proposition that Jones does arrive on time, or the proposition that Jones is going to arrive on time, etc.

Presumably, some of the relevant propositions will be ones expressed by indicatives formed with 'Jones' as subject and some form of 'arrive on time' as verb phrase. But this leaves open the possibilities noted just above. It's not as if all such indicatives express the same proposition. For example, the following two do not: 'Jones will arrive on time', 'Jones is arriving on time'.

In my formulation of (RV2), I opt for the first of the two choices just mentioned. At least, this is what I intend. I assume the following strict equivalence:

- (a) Necessarily, for any x:  
( x is wishing that it would be the case that Jones will arrive on time iff x is wishing that Jones would arrive on time ).

Actually, 'x is wishing that Jones would arrive on time' is ambiguous; on one reading, I take (a) to express a truth. See Note 11 below (part B.), for further discussion of the ambiguity in question here and of the general topic raised in this note. As far as I can see, the choice one makes among the above candidates for which proposition is being wished makes no difference to the considerations that I raise in the next chapter against (RV2).

5. Richard and Soames would certainly count fewer indicatives standard than I do. See Note 11 to Chapter 5 for references and a brief description of their view.

6. Actually, this seems questionable. I think that on its most natural interpretation, 'Jones will arrive on time' is context-sensitive. For I think we would normally and properly take it to be saying, with respect to some contextually determined occasion in the future, that Jones will arrive on time on that occasion. It is not clear to me that there is an interpretation of the sentence on which it is not context-sensitive in this way. Does the sentence have an interpretation on which it can be used merely to assert of some future occasion or other, that Jones will arrive on time on that occasion? I'm inclined to think so, but perhaps it is not clear. Perhaps there is an habitual interpretation that is context-insensitive, an interpretation on which the sentence may be used to assert that Jones can generally be relied on to arrive on time. At any rate, the natural interpretation mentioned first is the one intended in all the discussions to follow.

Still, I shall proceed with the assumption that 'Jones will arrive on time' is standard. Though it is

questionable, for purposes of illustration, it seems harmless enough.

7. The conclusion of PTA implies that it is not the case that there is any thought,  $x$ , uniquely such that necessarily if I am occurrently believing that politicians lie and cheat, then I am occurrently believing  $x$ . But I assume that the sentence, 'Politicians lie and cheat', is standard. So we already have a case against the claim that for any standard  $\emptyset$ , the following expresses a truth:

[ there's a unique thought,  $x$ , such that necessarily if one is occurrently believing that  $\emptyset$ , then one is occurrently believing  $x$  ].

The argument is fairly compelling (I won't repeat it here, see Chapter 4, section 4.8). But we can construct a parallel argument for the case of our sentence 'Jones will arrive on time'. The parallel depends on the following inference rule, which seems to me to be as plausible as its analogue in PTA:

(DIST<sub>1</sub>) For any appropriate singular term,  $t$ , from  
[ $t$  is occurrently believing that Jones will arrive on time]  
infer:  
[ $t$  is occurrently believing that Jones will arrive],

The parallel argument aims to establish that no thing is uniquely such that I am occurrently believing it whenever I am occurrently believing that Jones will arrive on time.

An analogous argument casts doubt on whether, roughly put, for any standard  $\emptyset$ , there is a thought that can be properly identified as what I am wishing, whenever I am wishing that it would be the case that  $\emptyset$ . For shouldn't we accept the following inference?

(DIST<sub>2</sub>) For any appropriate singular term,  $t$ , from  
[ $t$  is wishing that Jones would arrive on time]  
infer:  
[ $t$  is wishing that Jones would arrive]

If (DIST<sub>2</sub>) is accepted, then again we have a line of reasoning parallel to that of PTA leading to the conclusion that no thing is uniquely such that I am wishing it whenever I am wishing that Jones would arrive on time.

In the case of wondering, however, it is clear that the analogue of PTA does not go through; consider:

(DIST<sub>3</sub>) For any appropriate singular term,  $t$ , from  
[ $t$  is wondering whether Jones will arrive on time]  
infer:  
[ $t$  is wondering whether Jones will arrive]

Instantiating with 'Aronszajn', (DIST<sub>3</sub>) tells us that from

- (a) Aronszajn is wondering whether Jones will arrive on time

we may infer

- (b) Aronszajn is wondering whether Jones will arrive.

But surely there may be some occasions on which I am wondering whether Jones will arrive on time, but have no doubt that she will arrive eventually. So there are situations with respect to which (a) is true, while (b) is false. So (DIST<sub>3</sub>) is not in general valid.

At any rate, the two analogues to PTA involving (DIST<sub>1</sub>) and (DIST<sub>2</sub>) call into question whether, for every standard  $\emptyset$ , there is some thought uniquely satisfying the following open sentence (for 'y'):

[ nec  $\forall x$ ( x is occurrently believing y, wishing y or wondering y, respectively, if x is occurrently believing that  $\emptyset$ , wishing that it would be that  $\emptyset$ , or wondering whether  $\emptyset$  ) ]

And it is worth noting that related considerations suggest that it may also not be the case, generally, that, for any standard  $\emptyset$ , there is a thought uniquely satisfying the following:

[ nec  $\forall x$ ( x is occurrently believing y, wishing y or wondering y, only if x is, respectively, occurrently believing that  $\emptyset$ , wishing that it would be that  $\emptyset$ , or wondering whether  $\emptyset$  ) ]

Again, there would seem to be more than one thought satisfying the resulting open formula, for at least some choices of  $\emptyset$ . The problem may be intuitively put as follows: the proposition that Jones will arrive and the proposition that Jones will arrive on time are distinct; yet--take, for example, the case of occurrent believing--these two propositions would each seem to be such that one is occurrently believing it only if one is occurrently believing that Jones will arrive.

8. In passing, let me mention two ways in which I take (RV1) and (RV2) to formulate only restricted versions of the two component principles that make up the Received View. First, there are many other attitudes besides desire and wondering (and their principal occurrent counterparts) that would be claimed to share the modal range of belief. (RV1) is a restricted version of a thesis that would assert, of all of these attitudes, i) that they have the same modal

range, and ii) that this common modal range is made up exclusively of propositions.

I do not have any criterion to offer that would properly pick out the other attitudes that would be counted as sharing the modal range of belief. Certainly, not all attitudes would be counted. Here is an argument that shows why not. Either it is possible for contradictions to be believed, or it is not. (I would assume that it is possible; but for the sake of argument, let us suspend judgment.) Suppose it is possible. Then the modal range of belief and knowledge cannot be the same, for there are contradictions in the modal range of belief and none in that of knowledge. On the other hand, suppose that it is not possible to believe contradictions. Then there will be contradictions in the modal range of disbelief (and doubting, too, presumably) that are not in the modal range of belief. Still, it is safe to say that, according to a fully general version of the first component principle of the Received View, there would be very many attitudes, both occurrent and non-occurrent, that should be counted as having the same modal range as belief.

(RV2) is restricted in another respect. It is intended to formulate a version of the second component principle of the Received View, a principle that tells us, roughly, which proposition it is that a person bears an attitude to, given that what is expressed by an attitude ascription of the appropriate sort is true of that person. But (RV2) concerns itself with only three particular sorts of attitude ascriptions: those expressing the attitudes of occurrent belief, wishing and occurrent wondering, and of these ascriptions, only those that have sentential complements obtained from standard indicatives. A fully general version of the Received View would concern itself with the implications of what is reported by a much wider variety of attitude ascriptions: ones formed from a wide variety of attitude verbs (all those expressing attitudes that have the same modal range as belief) and ones containing sentential clause complements obtained from any sort of indicative, not just the standard ones.

So (RV1) and (RV2) formulate substantially restricted versions of these two component principles of the Received View. This should not affect the considerations to be raised against the Received View in the following chapter. Despite the restrictions, (RV1) and (RV2) formulate principles that capture central aspects of that view.

9. The rule is not plausible for de re interpretations of the relevant attitude ascriptions. On this point, see the remarks in Note 11 to Chapter 4 concerning the rule, (A?), similar to (R), that was cited in discussing PTA.

10. There are grounds for accepting (R). To begin with, it is very natural to hold that indicative clauses are

referential terms. Logical and syntactic behavior of such clauses is akin to that of terms that are uncontroversially referential. So, for example, positions occupied by such terms are open to existential generalization, as in the move from (a) to (b):

- (a) Many kids kicked that tin can
- (b) There is something that many kids kicked.

Likewise, the move from (c) to (d) seems acceptable and may be counted as a straightforward case of existential generalization, provided that indicative clauses are referential

- (c) Smith doubts that Jones will arrive on time
- (d) There is something that Smith doubts

A syntactic operation, passive transformation, allows the move from (a) to

- (e) That tin can was kicked by many kids.

Likewise a passive transformation allows the move from (c) to

- (f) That Jones will arrive on time is doubted by Smith.

(Although awkward, (f) is nevertheless grammatical). This behavior is characteristic of noun phrases generally, but apart from quantified expressions would seem to be otherwise characteristic of referential terms in particular, terms that purport to refer. Unless indicative clauses are in some heretofore unforeseen way to be analyzed as expressions of quantification (as Russellian theory of sentential clauses?), their behavior with passivization would seem to be most naturally accounted for by taking them to be referential.

There are also grounds for thinking that the items designated by indicative clauses are just what (R) says they should be. For some evidence in this connection, see the discussion of the plausibility of (RV2a) in 7.3.5. More generally, it certainly seems natural to suppose that such clauses figuring, for example, as complements in instances of the forms

- (Fa) t believes that  $\emptyset$
- (Fb) t doubts that  $\emptyset$
- (Fc) t hopes that  $\emptyset$

serve to specify those things to which the subjects of such attitude ascriptions bear the ascribed attitudes. This function is straightforwardly accommodated if we accept (R) and suppose that indicative clauses are terms designating things satisfying open sentences of the forms

(Fa') t believes x

(Fb') t doubts x

(Fc') t hopes x .

As to whether indicative clauses designate rigidly, there is reason to think that they do. We have just noted that when such clauses occur as complements of attitude verbs, as in ascriptions of forms (Fa) - (Fc), they serve to specify what things the subjects of the ascriptions bear the ascribed attitude to, what things the subjects are thinking. We may note, then, that whether or not such an occurrence of an indicative clause lies within the scope of a modal operator seems to make no difference to its function in this connection. Consider, for example:

(g) Smith is thinking that some shrewd spy is wealthy.

and

(h) It is possible that Smith is thinking that some shrewd spy is wealthy.

There seems to be no difference between, on one hand, what is claimed, in (g), to be a thing in fact such that Smith is occurrently believing it, and, on the other hand, what is claimed, in (h), to be a thing possibly such that Smith is occurrently believing it. This appearance is accounted for if we suppose that indicative clauses are rigid designators when they occur as complements in such attitude ascriptions.

Further support for this account comes from consideration of inferences like the following:

1) Smith is thinking that some shrewd spy is wealthy.

2) It is possible that Aronszajn is thinking that some shrewd spy is wealthy.

-----  
:: 3) There is something that Smith is thinking, and it is possible that Aronszajn is thinking it too.

The inference seems valid. The inference will be valid if we suppose that in the two premises, the indicative clauses figuring as complements of 'is thinking' rigidly designate. In sum, (R) seems to me a plausible thesis.

11. Two points of clarification concerning certain concepts involved in (R\*):

A. a point should be made concerning the "grammatical appropriateness" of a sentential clause as a complement of a given attitude verb. It is clear that we cannot freely interchange sentential clauses as complements from one such verb to another. Sentential clauses come in various forms; attitude verbs are highly selective in which forms they accept as complements. Let me briefly survey some examples of such selectiveness.

The following are pretty clearly unacceptable:

- (a1) ? I am wondering that Tom was finished with dinner.
- (a2) ? I am wishing whether Tom was finished with dinner.
- (a3) ? I believe whether Tom was finished with dinner.

'Determine', 'see', 'decide', 'try to think', 'remember' all take either indicative or 'whether' clauses, but do not accept subjunctive clauses; thus, the following are unacceptable:

- (b1) ? I remember that Tom were going to the store.
- (b2) ? I saw that Tom go to the store.

The following is perfectly acceptable, but does not contain a subjunctive sentential complement

- (b3) I saw Tom go to the store

Here, 'go to the store' is a so-called "naked infinitive", not a subjunctive form.

In current English, indicative clauses are coming to be acceptable as complements of 'wish' and 'is wishing'; for example, it's getting so that one would be counted inordinately picky if one held

- (c1) Jones wishes that McGovern was elected back in 1972.

to be unacceptable, and insisted, rather, on

- (c2) Jones wishes that McGovern had been elected back in 1972.

The following, however, is unacceptable to my ears as yet:

- (c3) Jones wishes that McGovern is president.



(Quine used

$\exists x$ ( Witold wishes that x is president ),

but recall his antecedent apology for "violence to grammar"; Quine [1976], p.186.)

The subjunctive clause plainly acceptable in (c2) seems pretty clearly unacceptable in

(d) ? Jones believes that McGovern had been elected in 1972.

I do not know what rules determine the grammatical appropriateness of a given sentential clause as complement to a given verb. I am inclined to think our intuitions of acceptability in these cases reflect lexical constraints at work, but I am prepared to believe that semantic factors are involved too.

B. A second point of clarification should be made concerning which sentential clauses are "obtained from" which indicative sentences. Let me consider three cases:

i) whether-clauses, like that in

(e) William is trying to think whether Sarah said "yes".

(I am leaving out an enormously varied group of interrogative clauses here, including for example all those beginning with 'if', 'how' or with the wh-terms, 'who', 'when', 'where', 'which', 'why', etc. Making (R\*) as plausible and clear as possible is hard enough without considering these cases.)

ii) present-tense subjunctive clauses, like that in

(f) Sarah insists that Jones arrive on time.

(Note that I am not counting verb phrases formed with 'were' or 'had' as present-tense subjunctives, but only those spelled the same as their corresponding naked infinitive forms, e.g., 'arrive on time', 'be prompt', 'have cleaned the table in time for dinner'.) And

iii) clauses whose main verbs are either subjunctive and formed with 'were' or 'had', or else formed from one of the modal auxiliaries, 'would' and 'could', as in

(g1) Sarah wishes that Jones were prompt

(g2) Sarah wishes that William could get the message

(g3) William is wishing that Jones would arrive on time

Please bear in mind with the following proposals that I am only attempting to clarify the notion of a clause being "obtained from" an indicative well enough so that the reader can give (R\*) a run for its money. The details of what this notion comes to, and any improvements needed for proposals suggested here (and any defense of (R\*) against criticism), I leave to proponents of (R\*) and the Received View. I am engaging in a bit of Devil's advocacy in what follows.

i) let us suppose that a whether-clause is "obtained from" an indicative  $\emptyset$  iff the clause is [whether  $\emptyset$ ]. Thus,

whether Sarah said "yes"

is obtained from the indicative

Sarah said "yes".

It follows from this assumption and (R\*) that the clause, 'whether Sarah said "yes" ', as it figures in (e), for example, rigidly designates the proposition that Sarah said "yes". Note that this proposal does not associate the clause, 'whether anyone left', with any indicative since 'anyone left' is not a sentence of English. The following is an indicative--'William is owed anything valuable that is recovered'--consequently, there is one interpretation of the clause, 'whether William is owed anything valuable that is recovered' on which it is associated with that indicative, but there is also an interpretation of the clause on which it is not associated with any indicative. The two interpretations are brought out by considering two corresponding interpretations of

(h) Sarah is wondering whether William is owed anything valuable that is recovered

On one reading of (h), Sarah's question comes to this: Are at least some of the valuable things recovered owed to William? On the other reading of (h), Sarah's question is rather: Are all of the valuable things recovered owed to William? So the notion of obtaining a clause from an indicative must be taken to be relative to an interpretation of the clause. We shall see shortly that this parameter for interpretation has to be acknowledged as well in the case of sentential clauses whose main verbs are formed with the auxiliary 'would'.

ii) Let us suppose that, where t is a singular term and VP is the present subjunctive form of a verb with suitable inflection, the clause [that t VP] is "obtained from" the

indicative [t will VP]. So, for example, the clause

that Jones arrive on time

is obtained from the indicative

Jones will arrive on time,

and (R\*) implies that the clause, as it occurs, for example, in (f), rigidly designates the proposition that Jones will arrive on time.

iii) Let us suppose that

- a. if the main verb of the clause is subjunctive and formed with 'were' or 'had', then the clause is obtained from the corresponding present-tense indicative,

for example: 'that Jones were prompt' is obtained from 'Jones is prompt'; 'that Jones had some money' is obtained from 'Jones has some money'. And let us suppose

- b. if the main verb of the clause is formed with the auxiliary, 'could', then the clause is obtained from the indicative form of the verb with the auxiliary 'can',

for example: 'that William could get the message' is obtained from 'William can get the message'. (But contra b., what about 'that John could be with us now'?)

If the main verb of the clause is formed with the auxiliary, 'would', there is an ambiguity to be dealt with. The indicative sentence from which the clause is obtained may well have the corresponding future indicative form of the verb, formed with the auxiliary 'will', but it needn't; it might contain the simple present form, understood on its habitual reading. For example, on the most natural interpretation of

- (i) Jones is wishing that McGovern would run for office again.

I take it that the Received View will say that what (i) expresses implies that Jones is wishing the proposition expressed by the sentence 'McGovern will run for office again'. But consider (g3) from above:

William is wishing that Jones would arrive on time.

This sentence is ambiguous. On one interpretation, it reports William's wish concerning some particular timely arrival on Jones' part. I take it that the Received View

will say that what is expressed by (g3), on this interpretation, implies that William is wishing the proposition expressed by 'Jones will arrive on time'. On the other hand, there is an interpretation of (g3) on which it reports William's concern for Jones' lack of promptness. I suppose that the Received View will say that on this interpretation, what is expressed by (g3) implies that William is wishing the proposition expressed by 'Jones arrives on time', on the habitual interpretation of this indicative.

My suggestions here are intended to make (R\*) as plausible as possible given appeal to the intuitive test outlined at the end of note 3. Here is one case: If Jones is wishing that McGovern would run for office again, we can ask: which proposition is it that Jones is wishing would be true (assume that Jones is familiar with the concept of truth)? Presumably: the proposition that McGovern will run for office again (at some relevant future time). Applying this test to (g3): suppose William is wishing that Jones would arrive on time, and he's only concerned about her punctuality, not about any particular upcoming arrival. Then we can ask--Which proposition is it such that William is wishing that it would be true?--a natural answer (from the perspective of the Propositional Tradition) would be: the proposition that Jones arrives on time (is so disposed).

The results of this test suggest that we adopt the following proposal:

- c. if the main verb of the clause is formed with the auxiliary, 'would', then the sentence from which it is obtained either contains as its main verb the simple present indicative or the future indicative formed with the auxiliary 'will', depending on the interpretation of the clause.

On assumptions a. - c., (R\*) tells us that the clauses

that Jones were prompt

that William could get the message

that Jones would arrive on time

as these occur in (g1) - (g3), designate, respectively,

the proposition that Jones is prompt

the proposition that William can get the message

and either

the proposition that Sarah arrives on time, or  
the proposition that Sarah will arrive on time,  
depending on interpretation.

Enough Devil's advocacy. ( $R^*$ ) may look simple, but in so far as a Propositional Traditionalist seriously proposes that the "simplicity" of ( $R^*$ ) is supposed to afford some motivation for their acceptance of the Received View, these matters concerning which sentential clauses are obtained from which indicative sentences are important and must be ironed out before any accurate assessment of the simplicity of ( $R^*$ ) can be made.

12. Actually, I have reservations with (RV1a) as it stands. I think it is plain that there are people (I am one) who satisfy the following open ascriptions:

- (a) x believes that the Mona Lisa is beautiful.
- (b) x believes that President Bush ought to change his policy in the Persian Gulf crisis.

I also take it to be clear that there are thoughts expressed by the following (perhaps with respect to a given context; let us set the matter of indexicality aside):

- (c) The Mona Lisa is beautiful
- (d) President Bush ought to change his policy in the Persian Gulf crisis,

Call the thoughts expressed by (c) and (d), " $T_c$ " and " $T_d$ ", respectively. Moreover, I take it that if a person,  $s$ , satisfies either (a) or (b), then the pair  $\langle s, T_c \rangle$ , or as well the pair  $\langle s, T_d \rangle$ , satisfies the following formula (for 'x' and 'y', respectively):

- (e) x believes y.

Then by (A6) (see Chapter 3) and (D8) (see Chapter 6), we get the result that  $T_c$  and  $T_d$  are occurrent beliefs. It seems clear to me that this is right, as long as we are taking (e) to express the intentional attitude expressed by the verb 'believe' in ordinary English (what else?). What is not clear to me, however, and what is certainly controversial, is the matter of whether  $T_c$  and  $T_d$  are either true or false.  $T_c$  is a value judgment;  $T_d$ , a normative judgment. Many philosophers would deny that such items have truth-value. If they are right, then  $T_c$  and  $T_d$  are counterexamples to (RV1a).

I happen to think that if a person satisfies (a) or (b), then the person is either incorrect (mistaken, wrong)

in so believing, or else correct (unmistaken, right). And I think that this will be so just in case what this person believes in such cases are things that are either true or false. But these considerations would not persuade any who take the other side on the issue of whether  $T_c$  and  $T_d$  are truth-valued. In what follows, I shall set this controversy aside, and stick with (RV1a) as it stands. The questions I raise concerning the Received View in the next chapter do not hinge on any of the matters raised here.

13. Roderick Chisholm and David Lewis have (independently) arrived at a certain account of intentional attitudes which might be thought to be incompatible with the Received View. See Chisholm [1981] and Lewis [1979a]. But care is required on this point. Let me confine my attention to the case of Lewis. It is not clear to me that parallel remarks may be expected to hold for Chisholm's views.

It is a consequence of Lewis' view that "objects" of the attitudes are properties; this is incompatible with the view that "objects" of the attitudes are items of the sort he speaks of as "propositions". Thus, on his present view, Lewis would no longer identify the "objects" of attitudes with sets of his possible worlds (and likewise, Chisholm would no longer identify the "objects" of attitudes with what he speaks of as "states of affairs"). But I use "proposition" to apply, by stipulation, to any truth-valued thought. So if there are any items in the modal range of belief that may be assigned truth-values, my use of "proposition" does apply to them. And I think that Lewis would allow that there are such items. (I have in mind certain "vacuous" properties: there is the property, for example, of being such that grass is green, true just in case grass is green, and the property of being such that there are two gods, true just in case there are two gods. These properties are objects of belief and truth-valued according to Lewis.) So I am inclined to think that Lewis would grant that there are at least some occurrent beliefs that are propositions. Still, it is fairly clear that he would reject the more general claim--that all occurrent beliefs are propositions--expressed in clause a. of (RV1).

At any rate, I suspect that Lewis would fully accept the b. and c. clauses of (RV1), and accordingly, would except (PT3) and its analogue concerning occurrent attitudes --the conjunction of (2') and (3') in the text. And I suspect that both Lewis and Chisholm retain the outlook of the Propositional Tradition in this respect: that the attitudes of belief, desire and wondering have precisely the same modal range, as do their occurrent counterparts. If this is right, then their current views are still subject to the considerations to be raised against the Received View in the next chapter, for the principal targets of those considerations are (PT3), (2') and (3').

CHAPTER 8  
AGAINST THE RECEIVED VIEW

8.1 Preface

In the previous chapter, I suggested that a test of adequacy for any account of thoughts would be that it accommodate a relationship between propositions and occurrent beliefs along the lines proposed by the Received View, in the a. clauses of (RV1) and (RV2). Those clauses assert that all occurrent beliefs are propositions, and more specifically, that if a person's occurrent believing is correctly reported by the ascription,

[t is occurrently believing that  $\emptyset$ ],

for some standard indicative,  $\emptyset$ , then at least one thing the person is occurrently believing is the proposition denoted, according to (D10), by [the proposition that  $\emptyset$ ].

The question remains: Can analogous relationships be plausibly asserted between wishes and propositions, or between questions and propositions? (RV1) implies that occurrent beliefs are propositions. We may accept this without accepting the separate claim, also implied by (RV1), that wishes and questions are occurrent beliefs. Roughly put, (RV2) identifies the proposition that  $\emptyset$  as a thing not only such that a) necessarily, I am occurrently believing it, if I am occurrently believing that  $\emptyset$ , but also such that

b) necessarily I am wishing it, if I am wishing that it would be that  $\emptyset$ , and such that c) necessarily, I wondering it, if I am wondering whether  $\emptyset$ . Even if we should accept a), it remains open whether we should accept a thesis that implies b) and c) as well.

### 8.1.1 A Proviso

In this chapter, I shall address some considerations that I believe motivate an alternative to the Propositional Tradition, considerations that suggest that the Received View should be abandoned. How these considerations would be viewed by Propositional Traditionalists depends, in part, on some questions of interpretation--on whether we differ in our understanding of the philosophical locutions figuring in (RV1) and (RV2). Only upon interpreting these formulations a certain way--a way that I think is quite natural but that nevertheless may not be the way intended by all Propositional Traditionalists--do we get principles expressed that I claim are called into question by the considerations to be raised in what follows.

For now, to make matters clear let me stress that I shall be concerned with what I think are philosophically familiar and central uses of the following locutions:

x is a thought	x is wishing y
x is thinking y	x is wondering y
x is occurrently believing y	x expresses y



On the uses in question, these locutions express concepts that I assume are related to one another in ways discussed in the course of Chapters 3 - 6. I shall try to make these assumed relationships explicit whenever I appeal to them.

### 8.1.2 (RV2.1)

In sections 8.3 and 8.4, I shall consider two lines of argument for claims that conflict with (RV2); one of these-- "The Linguistic Argument" as I'll call it--depends on intuitions concerning the concept of sentential expression; the second line of argument--"The Argument from Sameness of Thought"--relies on intuitions concerning the conditions under which persons may properly be said to be thinking the same thing.

Both lines of argument call into question the following consequence of (RV2):

- (RV2.1) The proposition that Jones will arrive on time is an  $x$  such that:
- a.  $\text{nec } \forall y( y \text{ is occurrently believing that Jones will arrive on time } \rightarrow y \text{ is occurrently believing } x )$ ,
  - b.  $\text{nec } \forall y( y \text{ is wishing that it would be that Jones will arrive on time } \rightarrow y \text{ is wishing } x )$
  - c.  $\text{nec } \forall y( y \text{ is wondering whether Jones will arrive on time } \rightarrow y \text{ is wondering } x )$ <sup>1</sup>

This formulates the contention with which we began our discussion of (RV2) in the preceding chapter: whether one is occurrently believing that Jones will arrive on time, wishing that she would or wondering whether she will, in either case, one thing one is occurrently believing, wishing

or wondering, as the case may be, is the proposition that Jones will arrive on time. The conclusions of the arguments we shall be considering are in direct conflict with this particular consequence of (RV2).

But I take the choice of embedded sentence in (RV2.1)--'Jones will arrive on time'--to be arbitrary among, and representative of standard indicatives generally. As I see it, then, the considerations I shall be raising in the following sections suggest that (RV2) fails in the case of a vast number if not all standard indicatives. I should mention, too, that I shall be contrasting just the cases of occurrent belief and wishing--examining only the implications of clauses a. and b. of (RV2.1). Still, I think it will be clear enough that considerations parallel to those we shall address in 8.3 and 8.4 provide equal grounds for questioning the Received View on wondering--for questioning whether the proposition that Jones will arrive on time is a thing that one is wondering whenever one is wondering whether Jones will arrive on time.

Before discussing these difficulties for the Received View, I need to do some stage-setting. The considerations I wish to raise have to do with a particular class of possible situations that I want to describe now in some detail.

## 8.2 Setting Stage: "\*-Situations"

Imagine a situation in which two persons, O'Brien and Witold, are awaiting the arrival of another person, Jones. O'Brien has utter confidence in Jones' promptness; at this very moment, he's occurrently believing that Jones will arrive on time. Witold is not at all confident about Jones' arriving on time, but he is presently wishing that it would be that Jones will arrive on time--he has a plane to catch, and Jones is supposed to take him to the airport. So the situation is one relative to which the reports expressed by these two ascriptions are true:

- (1) O'Brien is occurrently believing that Jones will arrive on time.
- (2) Witold is wishing that it would be that Jones will arrive on time.

So far, surely, we have a description of a possible situation.

### 8.2.1 The Analogues of PTA, Again

It would be good if we could further constrain the sort of situations at issue by assuming them to be ones in which, roughly, the occurrent belief that Jones will arrive on time is all that is on O'Brien's mind and, likewise, the wish that Jones would arrive on time is all that is on Witold's mind--situations, then, in which each is having just one thought. Then we could properly speak of "what O'Brien is occurrently believing" and "what Witold is wishing", and

investigate whether, as the case is described, there is reason either to maintain or to deny that O'Brien's occurrent belief is identical to Witold's wish. This would be good, because it would allow a simpler exposition of the case and a simpler formulation of my arguments.

Unfortunately, the analogues of the Plurality of Thoughts Argument (PTA) alluded to in the last chapter show, if they are sound, that no constraint of the sort envisioned is possible. Briefly, let's consider why this is the case.

One of the two relevant analogues of PTA, call it "PTA<sub>1</sub>", relies on the following inference rule

(DIST<sub>1</sub>) For any singular term, t, from  
[t is occurrently believing that Jones will arrive on time]  
infer:  
[t is occurrently believing that Jones will arrive],

From this, together with some further premises analogous to those involved in PTA, we get:

Conclusion of PTA<sub>1</sub>

Necessarily, if O'Brien is occurrently believing that Jones will arrive on time, then there are at least two things that O'Brien is occurrently believing

The other analogue, call it "PTA<sub>2</sub>", appeals to the rule

(DIST<sub>2</sub>) For any singular term, t, from  
[t is wishing that Jones would arrive on time]  
infer:  
[t is wishing that Jones would arrive],

and again, with premises analogous to those in PTA, yields:

Conclusion of PTA<sub>2</sub>

Necessarily, if Witold is wishing that it would be that Jones will arrive on time, then there are at least two things that Witold is wishing.

These two arguments, PTA<sub>1</sub> and PTA<sub>2</sub>, are surely just as compelling as PTA itself; and I think that PTA is fairly compelling. But--to return to our situations involving O'Brien and Witold--the conclusions of PTA<sub>1</sub> and PTA<sub>2</sub> imply that in those situations there is no single thing that is "what" O'Brien is occurrently believing, and no one thing that is "what" Witold is wishing. The very description of the case requires, if these arguments are sound, that O'Brien is occurrently believing at least two things and that Witold is wishing at least two things. The reader will get an idea of how this result complicates the matters I wish to discuss once we undertake the discussion.

Nevertheless, I propose to grant here that PTA<sub>1</sub> and PTA<sub>2</sub> are indeed sound. I don't think that the resulting complications in exposition will affect the intuitive force of the arguments against (RV2.1) that we shall be discussing. I do think that those arguments can be presented in a more clear-cut fashion, however, if we pare down, as much as possible, what things O'Brien and Witold may be said to be occurrently believing or wishing. There are some constraints that can be added to our description of the case that serve this purpose and that are nevertheless

compatible with the conclusions of  $PTA_1$  and  $PTA_2$ . So, to set the stage, let me present and discuss these constraints.

### 8.2.2 \*-Situations

First, I would like to give an intuitive idea of which situations the added constraints are supposed to corral. So far, I have said that we are considering situations in which O'Brien is occurrently believing that Jones will arrive on time, and Witold is wishing that it would be that Jones will arrive on time. But now I propose that we confine our attention to a proper subset of such situations in which, to put it intuitively, what is crossing O'Brien's mind at the moment is exhaustively reported by the following displayed-sentence ascription:

(1') O'Brien is thinking: *Jones will arrive on time.*

By saying that (1') reports "exhaustively" what is on O'Brien's mind, I mean to rule out that he is, say, wishing or wondering anything, or bearing any other attitude not required by his occurrently believing things. And I mean to rule out that he has any "stronger" occurrent beliefs than what is reported by (1'). Thus, although it might be accurate to use (1') to report what O'Brien is thinking if he is thinking: Jones will arrive on time and out of breath as usual, (1') would not, in such circumstances, report exhaustively what is crossing his mind. Put another way, the idea is that these are situations in which, if you asked

O'Brien what he is thinking, he would report by saying something like "I'm thinking that Jones will arrive on time." and if you ask, "Well, what else are you thinking", he'd say: "That's it; I was just thinking: *Jones is going to arrive on time*, and nothing else was on my mind at all". (He might well consider it frivolous, even if true (if he accepts  $PTA_1$ ), if we pointed out to him that he must also be thinking that Jones will arrive (tout court).)

Likewise for Witold: the situations I wish to attend to will be ones such that

(2') Witold is thinking: *Arrive on time, Jones.*

reports exhaustively what is crossing Witold's mind. I take this to rule out situations in which Witold is bearing other attitudes not required by the wishing reported by (2').

Also, as in O'Brien's case, I understand the restriction to rule out cases in which Witold is wishing anything stronger than what is reported by (2'). Ask Witold what he was thinking at the time, he will say "I was just wishing that Jones would arrive on time, that's all I was thinking, that's all that was crossing my mind.

That's the idea, roughly put. From here on, I shall refer to the situations I have in mind, described here roughly and intuitively, as "*\*-situations*". Next, I propose to state some constraints that corral these situations somewhat more precisely.

### 8.2.3 Constraints on \*-Situations

The first constraint that I wish to impose may be put:

#### Constraint 1 -----

\*-situations are ones in which

- a. O'Brien is thinking, concerning Jones: *Jones will arrive on time.*
- b. Witold is thinking, concerning Jones: *Arrive on time, Jones.*

I take the conditions of this constraint to imply that (1), (1'), (2) and (2') express things that are true relative to those situations. It would not have sufficed simply to say that the situations are ones relative to which the things expressed by (1) and (2) are true. For I believe that this would not capture all that follows, concerning these situations, from the truth, there, of the things expressed by (1') and (2'). And the features that, as it seems to me, would get left out, are ones that I wish to require.

Then why not simply put that the situations in question are ones relative to which the things expressed by (1') and (2') are true? I used to think that this would be enough, and I thought so because I used to think that (1) and (2) were implied, respectively by (1') and (2'), and that the adverbial, "concerning Jones", was not needed. And indeed if the implication of (1) by (1') (and of (2) by (2')) did hold (so to speak), it would be sufficient in the present connection to require that \*-situations are ones relative to which the things expressed by (1') and (2') are true. But I



think it is open to question whether (1) and (2) are implied, respectively by (1') and (2').<sup>2</sup>

Then why not simply require that \*-situations are ones relative to which the conjunctions--of (1) and (1') and of (2) and (2')--express truths? The problem with putting the constraint this way, roughly put, is that the things expressed by the displayed-sentence ascriptions might be true relative to some situations on grounds independent of the grounds of truth at those situations of the things expressed by (1) and (2). Take the case of (1) and (1'). I wish to require, roughly speaking, that in a \*-situation, O'Brien is occurrently believing of Jones that she will arrive on time, and that he pulls off this bit of occurrent believing in a way indicated by the truth of the displayed-sentence ascription, (1'). \*-situations, then, are to be understood, roughly, as ones where the same bit of thinking makes the claims expressed by both (1) and (1') true. The same idea goes, mutatis mutandis, for the case of (2) and (2'). I hope that the constraint stated above captures clearly enough, something at least in the neighborhood of the desired requirement.

In order to state the second constraint, it will be useful to have some further terminology. We say that one attitude requires another (from (D6), Chapter 4, p.31) roughly if bearing the one attitude to a thing, x, entails bearing the other attitude to something (though perhaps not

x). Then, where V-ing is the present participle form of any verb whose present progressive expresses an occurrent attitude, R, I propose to use ascriptions of the form,

[t is only V-ing t']

to assert of persons (or any things denoted by substituends of 't') that they are bearing R to things (denoted by substituends of t'), and that the only occurrent attitudes they are bearing to those things are ones required by R. I assume that occurrent belief requires neither wishing nor occurrent wondering. Then, for example, to say that a person is only occurrently believing, does not imply that she isn't also brushing her teeth, combing her hair or getting breakfast under way, but it does imply that she is neither wishing anything, nor wondering anything (nor bearing any other occurrent attitude not required by occurrent belief).

One further piece of terminology relating to the character of Witold's wishing will be useful in stating the second constraint. In Chapter 6, I noted that in certain cases, what a person is wishing might be thought expressed by an optative rather than by an imperative. I noted as an example that depending on the character of my wishing, if I am wishing that Rachel would pick up Carl's violin, it might be plausible to say that what I am wishing is expressed (wrt a context in which Rachel is addressee) with an optative, like

If only you would pick up Carl's violin  
or the more archaic

Would that you pick up Carl's violin  
and not by the imperative

Pick up Carl's violin.

I do not propose to settle the question of whether the optatives in such triples express the same thing as the imperative. But when I raised this matter in Chapter 6, I also noted that at least in some cases where one's wishing is, as I put it then, "sufficiently demanding" in character, what one is wishing is pretty clearly expressed by an imperative.

I don't have a precise account of conditions under which a wishing may be said to be demanding, in this sense, to a sufficient degree. I assume that we can say this much, however: roughly, that an event of wishing has this demanding character if that event is properly reported by an ascription of the form

t is thinking:  $\emptyset$

in which the substituend for 't' denotes the subject of the wishing, and the substituend for ' $\emptyset$ ' is an imperative. Let me call such sentences "displayed-imperative ascriptions".

It seems to me that any such ascription, if it expresses a truth, does report a wishing, and it seems to me, as well, that circumstances in which such ascriptions would be clearly counted as expressing truths are fairly familiar (even if the truth conditions for such ascriptions are themselves not exactly clear).

I suggest that we view wishings of the sort in question here as involving a particular, distinguishing occurrent attitude: an occurrent attitude, R, such that i) an event of wishing is sufficiently demanding in character iff it is an event of someone's bearing R to a thing, and ii) R is a species of wishing. (The notion of species relevant here was defined in (D7), see Chapter 4, p.31; roughly, one attitude is a species of another if bearing the first to a thing, x, entails bearing the second to x, and the second does not require the first.)

Now I want a verb phrase that will serve to express this occurrent attitude. Though I think that events involving this species of wishing are very familiar, there isn't, as far as I know, any verb in English that expresses the attitude precisely. On one of the more familiar interpretations of instances of

t wants t' to VP

('Mark wants Rachel to pick up Carl's violin', for example) these sentences report states that persons are in in virtue of bearing what I would say is a non-occurrent counterpart

of the occurrent attitude in question. But I don't think any form of the verb 'want' expresses the species of wishing in question. Nor do I know of any adverb in English that can modify 'is wishing' so that the resulting verb phrase expresses this attitude.

I propose to expropriate the adverb 'imperatively', and prefix it to the present participle in progressive forms of 'wish', obtaining such locutions as

is imperatively wishing,  
were imperatively wishing, etc.

and I shall take any such verb phrase to express the species of wishing in question (or else some directly related attitude, in the case of progressive forms that are not present-tense). To have a name for the attitude, I'll call it "imperative wishing".

Now the second constraint on \*-situations can be put, simply

Constraint 2 -----<sup>3</sup>  
\*-situations are ones in which:  
a. O'Brien is only occurrently believing;  
b. Witold is only imperatively wishing.

In \*-situations, Witold may believe that Jones is never prompt, but this can't be something that he is occurrently believing. For I suppose that occurrent belief is not

required by wishing and Witold is only wishing, and in fact only wishing imperatively. Consequently, there are no situations meeting Constraint 2 in which Witold occurrently believes anything at all. Likewise, there is nothing that O'Brien is wishing in such situations, though it is compatible with Constraint 2 that there be things that he desires (I mean the non-occurrent attitude of desire).

Constraint 2 captures part of what I meant when I said in the intuitive description offered in 8.2.2, that (1') and (2') serve to report exhaustively what is on Witold's and O'Brien's minds in \*-situations. The third constraint captures another feature of these situations that was supposed to be conveyed by that remark; it concerns which occurrent belief and wish may be said, intuitively, to be the strongest that O'Brien and Witold are having in the situations in question. The constraint may be put as follows:

Constraint 3 -----

\*-situations are ones in which

- a.  $\forall x$ ( if O'Brien is occurrently believing x, then nec  $\forall y$ ( if y is occurrently believing that Jones will arrive on time, then y is occurrently believing x )),
- b.  $\forall x$ ( if Witold is wishing x, then nec  $\forall y$ ( if y is imperatively wishing that it would be that Jones will arrive on time, then y is wishing x )).

Let us consider briefly what this further constraint is supposed to accomplish.

It will be useful to have the following notions:

- (D11) a. x is as strong an occurrent belief as y =df  
i) x and y are occurrent beliefs;  
ii) nec  $\forall z$ ( if z is occurrently believing x,  
then z is occurrently believing y )
- b. x is as strong a wish as y =df  
i) x and y are wishes;  
ii) nec  $\forall z$ ( if z is wishing x, then z is  
wishing y )

One occurrent belief (wish) is as strong as another, roughly, just in case whenever you are occurrently believing (wishing) the one, you are occurrently believing (wishing) the other. There are some notions closely related to these that I shall employ as well: we may say, for example, that an occurrent belief is stronger than another (it is as strong as the other, but the other is not as strong as it), or that two wishes are independent of one another (neither is as strong as the other).

Finally, it will make subsequent discussions easier if we adopt the following terminology. There are things necessarily such that a person occurrently believes them if he or she is occurrently believing that Jones will arrive. I shall refer to any of these as a "Jones belief". Similarly, there are things necessarily such that a person occurrently believes them if he or she is occurrently believing that Jones will arrive on time. Let us call any of these a "Jones-on-time belief". And I propose to use "Jones wish" and "Jones-on-time wish" understood in analogous ways. If  $PTA_1$  is sound, we must grant that every

Jones belief is a Jones-on-time belief but not vice-versa. An analogous point holds concerning Jones wishes and Jones-on-time wishes, if  $PTA_2$  is sound.

With this terminology, then, we may characterize the effects of Constraint 3 as follows: i) it rules out any situations in which O'Brien is occurrently believing anything that is independent of or stronger than any Jones-on-time beliefs, and ii) it rules out any situations in which Witold is wishing anything independent of or stronger than any Jones-on-time wishes. Let's consider how this affects what Witold may be said to be wishing.

I am inclined to think that there are possible situations conforming to the first two constraints relative to which the report expressed by

(2\*)        Witold is thinking: *Arrive on time, Jones, and please have the tickets in hand.*

is true. Let us call these "(2\*)-situations". Although the open formula

(2\*\*)        y is imperatively wishing that it would be that Jones will arrive on time

is satisfied by Witold relative to (2\*)-situations, there are things Witold is wishing in such situations some of which are stronger than, others independent of, anything one is wishing whenever one satisfies (2\*\*). Intuitively put, there's an imperative wish that Jones will arrive on time



and have the tickets in hand, and there's also an imperative wish, simply, that Jones will have the tickets in hand. Each of these is a wish Witold has in (2\*)-situations, yet the first is stronger than, the second independent of any Jones-on-time wishes. Consequently, (2\*)-situations do not meet Constraint 3, and cannot be counted among \*-situations.

Analogous points apply concerning the effect of Constraint 3 on what O'Brien may be said to be occurrently believing. For example, the constraint rules out situations in which O'Brien is occurrently believing that Jones will arrive on time and out of breath, for in such situations, he has an occurrent belief--intuitively, the belief that Jones will arrive on time and out of breath--stronger than any Jones-on-time beliefs.

Hereafter, when I speak of "\*-situations", I may be understood to mean all and only those situations conforming to Constraints 1 - 3. I believe that these constraints do capture the situations fitting the intuitive description I gave in 8.2.2. We have O'Brien thinking: *Jones will arrive on time*; we have Witold thinking: *Arrive on time, Jones*, and moreover, given Constraints 2 and 3, I think these situations are ones concerning which each of these displayed-sentence ascriptions I've just used may be said to report exhaustively what the person is thinking, what is crossing his mind, what's occurring to him. I assume that some such situations are possible. Although I don't have an

argument to buttress this assumption, it seems plausible to me on the face of it.

Next, in the following two sections, I wish to present some intuitive considerations concerning these \*-situations that form the basis for two separate lines of argument against (RV2.1).

### 8.3 The Linguistic Argument

In the last section of Chapter 6, I was concerned to develop and motivate a certain thesis about what sentences express. Loosely, the thesis can be put:

#### Thesis 2

- a. Indicatives express occurrent beliefs
- b. Imperatives express wishes
- c. Interrogatives express questions

Further reflection suggests that in the case of many sentences of each of the three varieties in question here, there isn't any latitude in which of these three breeds of thought those sentences may be said to express. That is to say: in the case of a large number of indicatives, it appears that they do not express anything besides occurrent beliefs; in the case of a large number of imperatives, it is implausible to hold that they express anything besides wishes, and in the case of very many interrogatives, it is not plausible to hold that they express anything besides questions. Intuitions supporting these generalizations form

the basis of what I shall call the "Linguistic Argument" against (RV2.1).

### 8.3.1 First Pass

I take it to be clear and uncontroversial that in any \*-situation, one thing that O'Brien is occurrently believing is the thing in fact expressed by

(3) Jones will arrive on time.

I am assuming that there is a unique thing expressed by (3) in English. The import of Thesis 2, concerning (3), is that this very thing--the thing expressed by (3)--is such that there are possible situations in which it is something someone is occurrently believing. What I am here claiming to be plain, additionally, is that \*-situations are examples of such possible situations, and that, in particular, the thing expressed by (3) is one of O'Brien's occurrent beliefs in such situations. Also, if we accept the intuitions that motivated Thesis 2, then we will grant that in any \*-situation, one thing that Witold is wishing is the thing expressed by the following imperative:

(4) Arrive on time, Jones.

Again, as in the case of (3), I am assuming that there is a unique thing expressed by (4), and it seems extremely plausible to me to say that this thing (4) expresses is something Witold is wishing in \*-situations.

However, it is surely counterintuitive to claim that the thing O'Brien is occurrently believing, and that (3) expresses, is also the very thing expressed by (4). The claim seems counterintuitive in two ways.

First, I have assumed (with (A7), Chapter 4, p.30) that what a person is occurrently believing at a time, are among the person's thoughts at the time--the things he or she is genthinking. This seems plausible prima-facie, and in particular it seems plausible to say that O'Brien's occurrent belief that is expressed by (3) is among the things he may be said to be thinking in these \*-situations. By contrast, however, it seems to me quite implausible to say that (4) expresses anything that O'Brien is thinking in \*-situations. For although it does seem to me that there are situations relative to which it would be correct to say of a person that (4) expresses something he or she is genthinking (Witold, for example, in our \*-situations), to say this of a person seems to me to imply that the person is wishing something in those situations, indeed imperatively wishing that it would be that Jones will arrive on time, that the person satisfies the open sentence

x is thinking: *Arrive on time, Jones*

relative to such situations. But this can't be the case with our situations involving O'Brien, for by Constraint 2, \*-situations are ones where O'Brien is only occurrently believing, and isn't wishing anything. So it seems that (4)

can't be said to express anything O'Brien is thinking. If this is right, and we wish to maintain that the occurrent belief expressed by (3) is among O'Brien's thoughts, then we have to allow that the latter occurrent belief is not what (4) expresses.

Second, if (4) expresses this occurrent belief expressed by (3), we should have to say that (3) and (4) express the same thing. This seems implausible on the face of it; if one understands the strict and literal usage of these sentences and has a proper grasp of the concept of sentential expression, one will not be inclined to equate what these sentences express. But if an argument is wanted, here is one. If two sentences express the same thing, then if a person has complete command of the proper usage of each sentence, and is not ignorant of what things the referring terms in the sentences denote, or of what properties or relations are expressed by constituent verbs, this person will be prepared to utter one of the two sentences literally and sincerely only if he or she is prepared to utter the other sentence sincerely and literally as well. It seems to me as clear as anything can be that a person may have complete command of proper usage of (3) and (4)--understand what 'will arrive on time' means, and understand the imperative form 'arrive on time'--and know, moreover, who is denoted by 'Jones', and yet sincerely utter either (3) or (4), intending the utterance to be taken literally, yet not

be willing to utter the other sentence sincerely and intend that utterance to be taken literally. Then (3) and (4) do not express the same thing.

In sum, it seems counterintuitive to say that (4) expresses the same occurrent belief that O'Brien has in these \*-situations that is expressed by (3). At this point, if only it were right to speak of the thing O'Brien is occurrently believing and the thing Witold is wishing, we would have a result that conflicts with (RV2.1). For if (3) expresses what O'Brien is occurrently believing in \*-situations, and (4) expresses what Witold is wishing in such situations, then we would have it that there are possible situations in which a person is occurrently believing that Jones will arrive on time, another person is wishing that it would be that Jones will arrive on time, yet in which it is not the case that there is any item, in particular not the proposition that Jones will arrive on time, that the one is occurrently believing and the other wishing--contrary to (RV2.1). Unfortunately, the effects of  $PTA_1$  and  $PTA_2$ , complicate matters. Still, Constraints 1 - 3 serve to keep the matters manageable, and the considerations raised just above concerning (3) and (4) and what they express in these \*-situations can be generalized. Let me explain how.

### 8.3.2 The General Case

The main thing to see is that in \*-situations, there just aren't that many things that it is plausible to think

that O'Brien is occurrently believing or that Witold is wishing, besides the occurrent belief and wish expressed respectively by (3) and (4). Let us consider the case of each person in turn.

If  $PTA_1$  is sound then there are at least two things that O'Brien is occurrently believing in \*-situations. But one gets the idea of which beliefs are in question; they must be Jones-on-time beliefs. One of these is expressed by (3), and there is a weaker one that is expressed by

(3') Jones will arrive.

Perhaps there are yet other Jones-on-time beliefs that analogues of PTA will require us to grant that O'Brien is occurrently believing in these situations. I am not sure of this, even conceding the sort of intuitions that underlie PTA.<sup>4</sup> At any rate, whatever occurrent beliefs O'Brien must be said to be having in \*-situations, I would claim that any occurrent beliefs O'Brien is having in these \*-situations will be such that, if they are expressed by sentences of English at all, they are expressed by indicatives. It seems to me extremely plausible that we can say at least this much about O'Brien's beliefs in those situations.

Now consider Witold's case. If, as we are assuming,  $PTA_2$  is sound, then it is true that there is no unique thing that Witold is wishing. But still, in virtue of Constraints 2 and 3, he is not bearing any other occurrent attitudes besides any that are required by his imperatively wishing

things, and moreover, the only things he is imperatively wishing are Jones-on-time wishes. We have seen that one of these is expressed by (4), and I think it is clear, too, that there is a weaker wish he is having that is expressed by

(4') Arrive, Jones.

And maybe there are other Jones-on-time wishes that we must allow that Witold is wishing if we accept analogues of PTA along the lines of  $PTA_2$ . (But see note 5.) However, since, according to Constraint 2, Witold is only imperatively wishing in these situations, and moreover, by Constraint 3, there is nothing that he is imperatively wishing apart from Jones-on-time wishes, it seems extremely plausible to me to say that anything Witold is wishing in these situations will be such that, if it can be expressed by a sentence of English at all, it is expressed by an imperative.

But if we grant these contentions concerning the thoughts O'Brien and Witold are having in \*-situations, then it seems to me that considerations parallel to those raised above concerning (3) and (4) will show that none of the things O'Brien is occurrently believing is expressed by any of the imperatives that express things that Witold is wishing. Again, there are two separate grounds. Let OB be an arbitrary occurrent belief that O'Brien is having in



these \*-situations; and suppose that  $\emptyset$  is any one of the imperatives that expresses something Witold is wishing. I claim  $\emptyset$  does not express OB. For two reasons:

First, whatever imperative  $\emptyset$  happens to be--(4), (4') or any other--if it expresses something O'Brien is occurrently believing, then it expresses something he is <sup>gen</sup>thinking. But if it expresses something he is <sup>gen</sup>thinking we ought to be able to report that thought by the displayed-imperative ascription

[O'Brien is thinking:  $\emptyset$ ]

And I claim that if this ascription expresses a report that is true, then it follows that O'Brien is wishing something, indeed imperatively wishing something, and this contradicts our description of \*-situations.

Second, suppose  $\emptyset$  does express OB. If what I have said about O'Brien is right, then anything he is occurrently believing that can be expressed in English at all is expressed by an indicative. Then there must be some indicative,  $\emptyset^*$ , that expresses OB, and consequently, expresses the same thing as  $\emptyset$ . But this, I claim, is implausible; an argument analogous to the one considered above, concerning (3) and (4), can be constructed to show that  $\emptyset$  and  $\emptyset^*$  do not express the same thing. Briefly: whatever indicative and imperative  $\emptyset^*$  and  $\emptyset$  may be, surely it could be that an ideally competent English speaker could

sincerely utter the one, yet not be prepared to utter the other sincerely. So it can't be that  $\emptyset$  expresses OB.

These considerations support the second premise of the following argument. To simplify formulation, let me use '\$' to denote an arbitrary \*-situation; then we may put:

The Linguistic Argument (LA)

- i) Whatever Witold is wishing in \$ is in fact expressed by an imperative, if it can be expressed by a sentence of English at all.
- ii) No imperative expresses anything O'Brien is occurrently believing in \$.
- 
- :: iii) Whatever Witold is wishing in \$, if it is in fact expressed in English at all, is distinct from anything O'Brien is occurrently believing in \$.

But we have already seen that in general, \*-situations are ones in which whatever Witold is wishing, if it can be expressed in English at all, it is expressed by an imperative. So it seems to me that we have intuitive support for both premises. And the argument is valid. So I think we have some compelling grounds for accepting the conclusion of this argument.

It is easy to see, however, that the conclusion of LA conflicts with (RV2.1). Let me use 'J' to denote the proposition that Jones will arrive on time. (RV2.1) implies that necessarily, anyone occurrently believing that Jones will arrive is occurrently believing J, and also necessarily, anyone who is wishing that it would be that Jones will arrive is wishing J. But from (D10) it follows

that J is a thing that is expressed in English--it is expressed by (3). From this fact and (RV2.1), then, we get the result that there is a thing--this proposition, J--that can be expressed in English, such that in any \*-situations (indeed in any possible situations relative to which the reports expressed by (1) and (2) are true), O'Brien is occurrently believing J, and Witold is wishing J. This result contradicts the conclusion of LA. Consequently, we must either give up (RV2.1) or else one or the other of the premises of this argument.

In section 8.5 below, I shall examine these options more closely, and address the question of how a proponent of the Received View might respond to LA. Before proceeding to these matters, there is another line of argument that I would like to present and discuss whose conclusion conflicts with (RV2.1). This second argument hinges on intuitions concerning the conditions under which two persons may properly be said to be <sup>gen</sup>thinking the same thing. The intuitions in question are brought out fairly clearly, I think, in connection with O'Brien's and Witold's thoughts in \*-situations.

#### 8.4 The Argument from Sameness of Thought

##### 8.4.1 What Would a Mind-Reader Say?

Imagine that we are mind-readers and that we're in the company of O'Brien and Witold, in a \*-situation as described

above. Suppose in fact that we are reading their minds, and that we are being careful to read all of what's crossing their minds. Then I think we would know that the ascriptions

(1') O'Brien is thinking: *Jones will arrive on time.*

and

(2') Witold is thinking: *Arrive on time, Jones.*

express truths under the circumstances. Moreover, if we are good mind-readers--able to read anyone's mind accurately and thoroughly--and are exercising our abilities with O'Brien and Witold, then presumably we would know that (1') and (2') report exhaustively what things are crossing O'Brien's and Witold's minds at the moment. We would know that O'Brien is only occurrently believing, that Witold is only imperatively wishing, and that neither of them has any wish or occurrent belief stronger than, or independent of the ones reported by (1') and (2'). Let us suppose that we are good mind-readers in this sense and that we do know these things about O'Brien's and Witold's thoughts in these circumstances.

Imagine, next, that another person, Smith, joins our company. Smith is a mind-reader too, and is reading O'Brien's mind, but for some reason is drawing a blank with Witold; he cannot tell what Witold is thinking. Yet he wants to know. What can we tell Smith that's relevant and true? Of course one way to tell him what he wants to know

is by issuing (2'). Perhaps just a mental utterance would suffice; perhaps we could just think: *Witold is thinking: Arrive on time, Jones*. If we added that this report is a thorough and exhaustive one, Smith would have the whole truth on the matter of what O'Brien is thinking. But suppose we don't tell him so much; I wish to emphasize two separate points.

First, I think it is clear, on one hand, that there is a familiar reading of progressive on which, in these \*-situations, if we told Smith that both O'Brien and Witold are thinking things, we would be telling him the truth. The reading is that on which the progressive expresses <sup>gen</sup>thinking. In other words, if we take the occurrence of the verb figuring in

(5) O'Brien is thinking something and Witold is thinking something.

on this reading, the report expressed by (5), so interpreted, is strictly speaking true relative to the situations under consideration. It is not clear to me, on the other hand, whether there is any familiar reading of 'is thinking' on which i) the verb applies to mental events (as we should want in these circumstances, since Smith wants to know what Witold is thinking at the moment, what thoughts he is having), yet on which ii) the report expressed by (5) is not strictly speaking true relative to \*-situations. If there were an occurrent belief reading of the progressive as

it figures in (5), these conditions would be met, for the report expressed, on this interpretation, would imply that Witold is occurrently believing something, and that is not the case. But I think it is very questionable whether such an occurrent belief reading exists. (For a summary of considerations relevant to this issue, see Chapter 4, section 4.5.)

Second, if the progressive is understood to express <sup>gen</sup>thinking, it seems plainly incorrect to say that there is anything that O'Brien and Witold are both thinking in these \*-situations, anything that they are thinking in common. If we were to tell Smith that Witold is thinking something that O'Brien is thinking, surely it would be proper for Smith to infer from our claim, together with what he knows (keep in mind, he knows what O'Brien is thinking) that Witold is occurrently believing something--perhaps the belief that Jones will arrive on time, perhaps the belief, simply, that Jones will arrive, perhaps some other Jones-on-time belief--but in any case, Smith could properly infer that Witold is occurrently believing something. But this conclusion is false under the envisioned circumstances; Witold is not occurrently believing anything. Since the inference is proper, our claim must itself be false. Any mind-reader who claims, concerning these \*-situations, that Witold is thinking something that O'Brien is thinking is either a poor

mind-reader, or a deceitful one (or perhaps a Propositional Traditionalist under tow of the Received View).

#### 8.4.2 Two Features of Generic Thinking

I find that appeal to considerations of mind-reading has some heuristic value here, because I think most of us have pretty clear intuitions--concerning situations where we suppose ourselves to be reading people's minds--about which cases are ones where we could correctly say that the people in question are having the same thoughts, or not. These intuitions hinge in turn, I think, on our intuitions about the things that persons may be said to be thinking, in the relational, generic sense, and these are intuitions of just the sort that I have wished to bring to the fore. But perhaps the reader finds thought-experiments that appeal to mind-reading unhelpful. It is worth stressing then that the possibility of mind-reading is not essential to the point I wish to make. The point is this:

It seems to me clearly false to say that O'Brien and Witold are thinking any of the same things in these \*-situations. At least, this seems clearly false, if the relational, generic reading of the progressive is intended, and I we have seen it to be questionable whether there is any other event reading available in ordinary English usage. Consider any \*-situation and assume that you know (whether by mind-reading or any other means) what O'Brien and Witold are thinking. Ask yourself whether it would be correct to

say that these two have any thoughts in common, whether it would be correct to say that there are any things that are crossing both of their minds, occurring to them both. It seems to me to be clear that the answer to these questions is "No." Then I take it that there isn't anything that both can be said to be thinking, in the generic sense in question.

Somewhat more formal and general grounds for this point may be put as follows. It seems to me a plain feature of the generic reading of the progressive of 'think', that if we are told that one person is thinking something that another is thinking, and moreover, we know that this other is bearing some species of generic thinking, R, and is not bearing any other occurrent attitude (apart from any that happen to be required by R), then it is proper for us to infer that both people are bearing R to something in common too.

More specifically, I claim that the following theses capture two clear features of <sup>gen</sup>thinking by which it is related to the attitudes of occurrent belief and wishing:

- (A9) a.  $\text{nec } \forall x \forall y \text{ nec( if } \exists z( x \text{ is } \text{gen}^{\text{thinking}} z, \text{ and } y \text{ is } \text{gen}^{\text{thinking}} z ), \text{ and } x \text{ is } \underline{\text{only}} \text{ occurrently believing, then } \exists z( x \text{ is occurrently believing } z \text{ and } y \text{ is occurrently believing } z ))$
- b.  $\text{nec } \forall x \forall y \text{ nec( if } \exists z( x \text{ is } \text{gen}^{\text{thinking}} z, \text{ and } y \text{ is } \text{gen}^{\text{thinking}} z ), \text{ and } x \text{ is } \underline{\text{only}} \text{ wishing, then } \exists z( x \text{ is wishing } z \text{ and } y \text{ is wishing } z ))$

Roughly, a) if two persons are thinking something in common



and one of them is only occurrently believing, then there is something that both of them are occurrently believing, and similarly for wishing, b) if two persons can be said to be thinking something in common, and one of the two is only wishing (whether imperatively or optatively, or in any other manner), then there is something that both of them are wishing (in some manner or other).

Let me try to bring out some intuitions relevant to these assumptions without appeal to mind-reading. Suppose that O'Brien and Witold are accompanied in these \*-situations by some partners, O'Brien\* and Witold\*, and let us suppose that the following express reports that are true relative to the situation in question:

(6) O'Brien\* is thinking: *Jones will arrive on time*

(7) Witold\* is thinking: *Arrive on time, Jones*

I think that most of us might ordinarily be inclined to say, concerning such a case, that O'Brien and his partner are thinking the same thing, and also that Witold and his partner are thinking the same thing. And if it weren't for considerations of the sort raised by PTA<sub>1</sub> and PTA<sub>2</sub>, and other analogues of PTA, I would contend that these things we'd ordinarily be inclined to say might well be correct. But we are granting that such arguments are sound, and so I take it that, strictly speaking, we must deny that they are thinking the same thing. A similar point goes for Witold and his partner. Moreover, the truth of (6) and (7)

relative to given \*-situations does not even suffice for it's being the case that either O'Brien and his partner, or Witold and his, are thinking the same things. For take the case of Witold\*: perhaps (7) isn't an exhaustive report of what is on his mind. Perhaps the following expresses a truth as well:

(7\*) Witold\* is thinking: *Arrive on time, Jones and have the tickets in hand.*

Then I think it would be incorrect, strictly speaking, to say that Witold and Witold\* are thinking the same things.

Nevertheless, the following claims do seem to me clearly true:

(8) O'Brien and O'Brien\* are thinking some things in common.

(9) Witold and Witold\* are thinking some things in common.

By contrast, the following expresses a report whose truth, I think, is not guaranteed by our description of the case so far:

(10) O'Brien\* and Witold\* are thinking some things in common.

This sentence does express a report true relative to some situations conforming to our description. For I suppose that we may consistently add to that description that in addition to the thoughts reported by (6) and (7), the

partners are both thinking: *Jones has a tendency to be late in a crunch.*

However, on any interpretation available in English, I think it is plain that the following expresses a report that is false given just the description of the case so far:

(11) O'Brien and Witold are thinking some things in common.

It seems to me that this assessment is clear if we understand the description of the case; and it seems to me that adequate grounds for this assessment are that we know by description of \*-situations that O'Brien is only occurrently believing, we know that Witold is only wishing, and it can't be that one person is only occurrently believing, and another is only wishing, and yet there are any things the two may both be said to be thinking. For the claim that either is thinking some things the other is implies that they share one of these two attitudes, and by description of the case, they do not. Behind this reasoning lie the assumptions expressed in clauses a. and b. of (A9).

I do not have an argument to offer to establish that what these clauses assert is true; nevertheless, it seems plain to me that the claims formulated there do in fact govern the concept of thought expressed with the generic reading of 'think' in English. I assume them to be true.

### 8.4.3 The Argument

I take it that occurrent belief, wishing and wondering are all species of generic thinking (this follows from the definition of 'is a species of', together with (A7) and some other very natural assumptions about these attitudes). But if this is right, then the claim that O'Brien and Witold are not thinking any things in common can be seen to conflict with (RV2.1). For we have the following argument (again, suppose '\$' to denote some arbitrary \*-situation):

#### The Argument from Sameness of Thought (AST)

- i) Whatever O'Brien is occurrently believing in \$ is something he is <sup>gen</sup>thinking in \$, and whatever Witold is wishing in \$ is something he is <sup>gen</sup>thinking in \$. [from (A7)]
  
- ii) There is nothing that O'Brien and Witold are both <sup>gen</sup>thinking in \$. [from (A9) and Constraint 2]  
-----
- :: iii) Whatever Witold is wishing in \$ is distinct from anything O'Brien is occurrently believing in \$.

Plainly this conclusion conflicts with (RV2.1). If (RV2.1) is correct, then in any \*-situation (indeed in any situation where O'Brien is occurrently believing that Jones will arrive on time, and where Witold is wishing that it would be that Jones will arrive on time), there is a thing--the proposition that Jones will arrive on time--that O'Brien is occurrently believing, and that Witold is wishing. So according to (RV2.1), there is a thing such that O'Brien is occurrently believing it in \$ and Witold is wishing it in \$. This contradicts iii). Since the argument is valid, we must either give up (RV2.1), or the first premise (together with

(A7) from which it is derived), or else premise ii) which is supported by the intuitive considerations raised above concerning the conditions under which two people may be said to be thinking something in common.

In the next section, I propose to point out ways in which the considerations that motivate LA and AST can be generalized. If those considerations are right, much more is shown, I believe, than merely that (RV2.1) is wrong with respect to a few isolated cases.

## 8.5 Generalizing the Results of the Arguments

### 8.5.1 That No Instance of (RV2) Holds

I claimed at the end of 8.1, after formulating (RV2.1), that since the thesis was an arbitrary and representative instantiation of (RV2)--by choice of the (assumed) standard indicative, (3):

Jones will arrive on time

for '∅'--the arguments I was about to propose against (RV2.1) would count against any instance of (RV2) at all. Briefly, here's why I think that this is so.

No matter how one proposes to instantiate (RV2)--no matter which indicative one puts in for '∅'--I am inclined to think that there are possible situations analogous to \*-situations in the following respects: for the selected ∅, i) the claims expressed by the following pairs of standard

ascriptions and displayed-sentence ascriptions will be true relative to those situations:

Standard:

[ O'Brien is occurrently believing that  $\emptyset$  ]

[ Witold is wishing that it would be that  $\emptyset$  ]

Displayed-Sentence:

[ O'Brien is thinking:  $\emptyset$  ]

[ Witold is thinking: *Let it be that  $\emptyset$ .* ],

ii) the claims expressed by these sentences are true relative to these situations in virtue of the occurrence, there, of the same bit of occurrent believing on O'Brien's part, and the same bit of wishing on Witold's part,<sup>5</sup> and  
iii) the claims expressed by the displayed-sentence ascriptions are not only true, but exhaustive as well. In saying that the claims are "exhaustive" I mean that analogues of Constraints 2 and 3, discussed in 8.2, will apply.

A choice of standard indicative,  $\emptyset$ , then, will determine a class of such \*-situation analogues, and concerning that class of possible situations, a pair of arguments paralleling LA and AST may be formulated; where "\$" denotes any situation in the class:

LA $\emptyset$

- i) Whatever Witold is wishing in  $\$$  is in fact expressed by an imperative, if it can be expressed by a sentence of English at all.
- ii) No imperative expresses anything O'Brien is occurrently believing in  $\$$ .  
-----
- :: iii) Whatever Witold is wishing in  $\$$ , if it is in fact expressed in English at all, is distinct from anything O'Brien is occurrently believing in  $\$$ .

AST $\emptyset$

- i) Whatever O'Brien is occurrently believing in  $\$$  is something he is <sup>gen</sup>thinking in  $\$$ , and whatever Witold is wishing in  $\$$  is something he is <sup>gen</sup>thinking in  $\$$ . [from (A7)]
- ii) There is nothing that O'Brien and Witold are both <sup>gen</sup>thinking in  $\$$ . [from (A9) and Constraint 2]  
-----
- :: iii) Whatever Witold is wishing in  $\$$  is distinct from anything O'Brien is occurrently believing in  $\$$ .

It seems to me that the intuitive support available for the premises of any of these arguments will be precisely on a par with that afforded for the premises of LA and AST themselves by the considerations raised in 8.3 and 8.4. Entirely analogous considerations can be raised in each case. To put it briefly, choice of indicative ' $\emptyset$ ' simply makes no difference to the intuitive support available.<sup>6</sup>

And I take it to be plain, that if every such analogue of LA or AST is sound, then we will have it (put roughly) that no matter the choice of indicative,  $\emptyset$ , there are possible situations in which, although O'Brien is occurrently believing that  $\emptyset$  and Witold is wishing that it would be that  $\emptyset$ , nevertheless, whatever Witold is wishing, if it can be expressed in English at all, it is distinct

from anything O'Brien is occurrently believing. Then we will have the result, contrary to the relevant instantiation of (RV2), that it is not the case that the proposition that  $\emptyset$  is an  $x$  such that necessarily, if a person is occurrently believing that  $\emptyset$ , that person is occurrently believing  $x$ , and necessarily, if a person is wishing that it would be that  $\emptyset$ , that person is wishing  $x$ .

I assume, then, that if the considerations raised in the previous sections in support of the premises of LA and AST are to be accepted, then not only (RV2.1) but any instance of (RV2) should be rejected as well. Consequently, if all LA- and AST-analogues cited above are indeed sound, then a first generalization of this result could be put as follows:

- (12) For any standard indicative,  $\emptyset$ , the following expresses a truth:
- [ It is not the case that the proposition that  $\emptyset$  is an  $x$  such that:  
nec  $\forall y$ (  $y$  is occurrently believing that  $\emptyset \rightarrow y$  is occurrently believing  $x$  ), and  
nec  $\forall y$ (  $y$  is wishing that it would be that  $\emptyset \rightarrow y$  is wishing  $x$  ) ]

#### 8.5.2 The Proposition that $\emptyset$ Is Not an Isolated Case

(12) is only a start at generalizing the results of the preceding sections. If  $LA\emptyset$  and  $AST\emptyset$  are indeed sound concerning any relevant situation,  $\$$  (determined by our choice of  $\emptyset$ ), then if we consider the conclusions of those arguments, it will be apparent that a much more substantial



generalization can be made. For those conclusions suggest that the proposition that  $\emptyset$  is no isolated case in this regard: more generally, in the relevant situations, there simply is no thing such that O'Brien is occurrently believing it, and Witold is wishing it. Put a little more carefully, the view that emerges is this:

(13) For any standard indicative,  $\emptyset$ , the following expresses a truth:

[ There is no thing, x, such that:  
nec  $\forall y$ ( y is occurrently believing that  $\emptyset \rightarrow y$  is  
occurrently believing x ), and  
nec  $\forall y$ ( y is wishing that it would be that  $\emptyset \rightarrow$   
y is wishing x ) ]

No matter the choice of standard indicative,  $\emptyset$ , there is no thought, x, such that i) occurrently believing that  $\emptyset$  entails occurrently believing x, and also, ii) wishing that it would be that  $\emptyset$  entails wishing x. This result is one important generalization of the considerations raised in sections 8.3 and 8.4.

Strictly speaking, the conclusions of the LA-analogues do not support this view expressed in (13). Rather, those arguments, if sound, merely yield the view that, for any standard,  $\emptyset$ , there is no x expressible in English such that occurrently believing  $\emptyset$  entails believing x, and wishing that it would be that  $\emptyset$  entails wishing x. Still, it would be an odd result if it turned out that there is some thought not expressible in English--and only such a thought--that has the property of being an x such that necessarily, if one

is occurrently believing that  $\emptyset$ , one is occurrently believing  $x$ , and necessarily, if one is wishing that it would be that  $\emptyset$ , one is wishing  $x$ . It might well be wondered what other thoughts could plausibly be supposed to have this property if no thoughts expressible in English do. The attitudes in question are themselves reportable in English with the very ascriptions employed just above embedding an English indicative,  $\emptyset$ . One might have thought that if there are any thoughts such that, for some English indicative,  $\emptyset$ , occurrently believing that  $\emptyset$  entails occurrently believing those thoughts, and wishing it would be that  $\emptyset$  entails wishing those thoughts, then at least some thoughts expressible in English would be among them. At any rate, the conclusions of the AST-analogues do support the claim expressed in (13), for they involve no restriction at all to thoughts expressed by any particular class of sentences.

#### 8.5.3 Choice of $\emptyset$ Not Restricted to Standard Indicatives

But (13), too, can be generalized on the basis of considerations akin to those already raised. The analogues of \*-situations we have been envisioning are situations in which, for some standard indicative,  $\emptyset$ , one person is occurrently believing that  $\emptyset$ , and another, wishing that it would be that  $\emptyset$ . But the restriction here to standard indicatives was introduced because (RV2) was formulated by appeal to ascriptions embedding only such sentences, and



(17) for any indicative,  $\emptyset$ , if  $c$  is a context, and  $\emptyset$  expresses something wrt  $c$ , then the following expresses a truth with respect to  $c$ :

[ There is no thing,  $x$ , such that:  
nec  $\forall y$ (  $y$  is occurrently believing that  $\emptyset \rightarrow y$  is  
occurrently believing  $x$  ), and  
nec  $\forall y$ (  $y$  is wishing that it would be that  $\emptyset \rightarrow$   
 $y$  is wishing  $x$  ) ]

Roughly, (17) asserts that whether  $\emptyset$  is standard or not, there is no thought such that i) occurrently believing that  $\emptyset$  entails having that thought as an occurrent belief, and yet also such that ii) wishing that it would be that  $\emptyset$  entails having that thought as a wish. If the relevant analogues of LA and AST are indeed sound, I believe it should be granted that this much is established.

#### 8.5.4 Thesis 3

(17) is the view that emerges if we are attending solely to cases involving, roughly, a person's occurrently believing that  $\emptyset$ , and another's wishing that it would be that  $\emptyset$ . But considerations still quite parallel to those raised in sections 8.3 and 8.4 arise regarding cases in which one person is occurrently believing that  $\emptyset$ , and another is wondering whether  $\emptyset$ , and as well regarding cases in which one person is wondering whether  $\emptyset$ , and another is wishing that it would be that  $\emptyset$ . In brief: any pair of the three occurrent attitudes at issue in (RV2) will be affected. So, in particular, considerations relevantly like those raised so far support the view that there is no thing,

x, of which it is both the case that occurrently believing that  $\emptyset$  entails occurrently believing x, and wondering whether  $\emptyset$  entails wondering x. Likewise, analogous considerations support the view that there is no thing, x, of which it is both the case that wishing that it would be that  $\emptyset$  entails wishing x, and wondering whether  $\emptyset$  entails wondering x.

As an illustration, let us consider the latter view concerning wishing and wondering. It seems clear to me that no matter which indicative,  $\emptyset$ , one picks, there will be possible situations relative to which the reports expressed by the following pairs of standard and displayed-sentence ascriptions will be true, exhaustive and true in virtue of the same bit of wondering on O'Brien's part and in virtue of the same bit of wishing on Witold's:

[ O'Brien is wondering whether  $\emptyset$  ]

[ Witold is wishing that it would be that  $\emptyset$  ]

[ O'Brien is thinking: *Is it the case that  $\emptyset$ ?* ]

[ Witold is thinking: *Let it be the case that  $\emptyset$ .* ]

(On this point, though, see notes 6. and 7.) Then again, arguments precisely parallel to LA and AST may be formulated, this time with the assumption that "\$" denotes one of the presently envisioned situations:

LA\* $\emptyset$

- i) Whatever Witold is wishing in \$ is in fact expressed by an imperative, if it can be expressed by a sentence of English at all.
- ii) No imperative expresses anything O'Brien is wondering in \$.  
-----
- :: iii) Whatever Witold is wishing in \$, if it is in fact expressed in English at all, is distinct from anything O'Brien is wondering in \$.

AST\* $\emptyset$

- i) Whatever O'Brien is wondering in \$ is something he is gen<sup>th</sup>inking in \$, and whatever Witold is wishing in \$ is something he is gen<sup>th</sup>inking in \$.  
[from (A7)]
- ii) There is nothing that O'Brien and Witold are both gen<sup>th</sup>inking in \$. [from (A9) and Constraint 2]  
-----
- :: iii) Whatever Witold is wishing in \$ is distinct from anything O'Brien is wondering in \$.

If the premises of the relevant instances of LA\* $\emptyset$  and AST\* $\emptyset$  (determined by the choice of  $\emptyset$ ) are understood to concern any one of the situations now envisioned, it seems to me that the intuitive support for those premises will still be as strong as in preceding cases; in particular, it seems to me that it will be just as strong as the intuitive support for LA and AST afforded by the considerations raised in sections 8.3 and 8.4.

Then the view that emerges is this:

- (18) for any indicative,  $\emptyset$ , if c is a context, and  $\emptyset$  expresses something wrt c, then the following expresses a truth with respect to c:

[ There is no thing, x, such that:  
nec  $\forall y$ ( y is wondering whether  $\emptyset \rightarrow y$  is wondering x ), and  
nec  $\forall y$ ( y is wishing that it would be that  $\emptyset \rightarrow y$  is wishing x ) ]

(18) asserts just what was proposed above, that no matter the choice of indicative  $\emptyset$ , there is no thought,  $x$ , such that both i) wondering whether  $\emptyset$  entails wondering  $x$ , and as well ii) wishing that it would be that  $\emptyset$  entails wishing  $x$ .

I think it should be plain enough that relevantly similar considerations, but regarding cases in which one person is occurrently believing that  $\emptyset$ , and another is wondering whether  $\emptyset$ , will provide motivation for a principle parallel to (18) concerning the attitudes of occurrent belief and wondering. Perhaps it is safe by now not to rehearse the steps for this case.

Let me gather the generalizations that I have proposed so far into a single broad claim:

### Thesis 3

For any indicative,  $\emptyset$ , and context,  $c$ , if  $\emptyset$  expresses something with respect to  $c$ , then the following expresses a truth with respect to  $c$ :

- [ a. There is no thing,  $x$ , such that  
nec  $\forall y$ (  $y$  is occurrently believing that  $\emptyset \rightarrow y$  is occurrently believing  $x$  ), and nec  $\forall y$ (  $y$  is wishing that it would be that  $\emptyset \rightarrow y$  is wishing  $x$  );
- b. There is no thing,  $x$ , such that  
nec  $\forall y$ (  $y$  is occurrently believing that  $\emptyset \rightarrow y$  is occurrently believing  $x$  ), and nec  $\forall y$ (  $y$  is wondering whether  $\emptyset \rightarrow y$  is wondering  $x$  );
- c. There is no thing,  $x$ , such that  
nec  $\forall y$ (  $y$  is wondering whether  $\emptyset \rightarrow y$  is wondering  $x$  ),  
and nec  $\forall y$ (  $y$  is wishing that it would be that  $\emptyset \rightarrow y$  is wishing  $x$  ). ]

I submit that, whatever intuitive appeal the reader finds in considerations of the sort raised in sections 8.3 and 8.4,

in support of the premises of LA and of AST, similar considerations, with equal intuitive force, can be raised in support of each of the clauses here in Thesis 3, no matter what indicative,  $\emptyset$ , one picks for the instantiation.



NOTES TO CHAPTER 8

1. Strictly, (RV2.1) is not a consequence of (RV2) alone, but rather of (RV2) together with (D10), and some semantic assumptions, including the assumption that 'Jones will arrive on time' is standard. For questions concerning this last assumption, see Note 11 to Chapter 5, and Note 6 to Chapter 7.

2. I think it is fairly clear that the following inference schemes, of which (1')/:::(1) and (2')/:::(2) are instances, have some invalid instances:

- i)            t is thinking:  $\emptyset$   
                   -----  
                   :: t is occurrently believing that  $\emptyset$
- ii)            t is thinking:  $\emptyset^*$   
                   -----  
                   :: t is wishing that it would be that you  $\emptyset^*$

where substituends of ' $\emptyset$ ' are indicative sentences, and substituends of ' $\emptyset^*$ ' are verb phrases (serving as displayed imperatives in premises of ii)).

The following instance of i), for example, is open to counterexamples:

- $i_M$ ) (a)    Max is thinking: That is a mint-condition  
                   Chippendale.  
                   -----  
                   :: (a') Max is occurrently believing that that is a mint-  
                   condition Chippendale.

Suppose that Max is having a vivid hallucination and that there isn't anything that he is demonstrating, in thinking: that is a mint-condition Chippendale. I mean a case like the one I described in Chapter 4 where I was concerned to give some idea of the grounds I had for questioning the inference (the subscripts, i and t, indicate, respectively, that intransitive and transitive readings are called for):

- III)            t is thinking<sub>i</sub>  
                   -----  
                   ::  $\exists x$ ( t is thinking<sub>t</sub> x )

I noted then (in effect) that the premise of  $i_M$ ), (a), implies

- (b)            Max is thinking<sub>i</sub>

And I suggested that, in some circumstances of the sort

envisioned, although (a) expresses a truth, what is expressed by

(c)  $\exists x(\text{Max is thinking}_t x)$

is false. Then III) fails. But I am inclined to believe that if the conclusion of  $i_M$ ), (a'), expresses a thing that is true relative to a situation, then so does (c). But if (a') implies (c), and (a) does not imply (c), then (a) does not imply (a'), and the inference,  $i_M$ ), fails. So i) itself is not an inference scheme whose instances are in general valid. Similar counter-examples, I believe, show that some instances of ii) are not valid as well. It may be that cases of this sort defeat the claim that (1) and (2) may be inferred, respectively, from (1') and (2'). I am not sure.

It is worth contrasting i) with a similar inference rule relating direct to indirect quotation:

iii)  $t$  said, " $\emptyset$ "  
-----  
::  $t$  said that  $\emptyset$

One might suppose that instances of i) will stand or fall with corresponding instances of iii) (having the same substituends for 't' and ' $\emptyset$ ').

Well-worn examples involving context sensitivity show that instances of iii) are not in general valid. Consider the following:

iii<sub>W</sub>) William said, "Someone wants you to say 'yes'."  
-----  
:: William said that someone wants you to say "yes".

Let a context,  $c$ , be fixed that assigns Nancy Reagan to 'you'. Now consider a situation in which William has never said anything about Nancy Reagan, and in particular, has never said that anyone wants her to say "yes" to anything. But suppose too that in this situation, William has, a moment ago, asked Sarah if she'll marry him, and after a pause, told her that someone wants her to say "yes". I am inclined to say that what is expressed by the premise of iii<sub>W</sub>), with respect to  $c$ , is true relative to some such situations. Let " $s$ " denote one such. Yet surely what is expressed by the conclusion of iii<sub>W</sub>) with respect to  $c$  is false relative to  $s$ . Then iii<sub>W</sub>) fails.

The point here is that although we keep a context fixed in determining what is expressed by both the premise and conclusion, the occurrence of 'you' figuring in the premise, in contrast with that figuring in the conclusion, does not have its semantic contribution determined by context. So the conclusion, but not the premise, will be context-sensitive. With variation of context, then, we find that what is expressed by the premise remains constant but what

is expressed by the conclusion will vary, and do so with attendant variation in truth-value relative to selected situations. I believe that similar cases (mutatis mutandis) hinging in this way on context-sensitivity of the conclusions yield counterexamples to certain instances of both i) and ii) as well. But if the inference of (1) from (1') fails, it will not be due to such examples since, I take it, (1) is context-insensitive, and the same goes for the inference of (2) from (2').

However, perhaps it is worth noting that there are some instances of iii), with context-insensitive conclusions, that are invalid as well. Consider:

iii<sub>F</sub>) Benjamin Franklin said: "President Bush will never order an invasion of Iraq"  
-----  
:: Benjamin Franklin said that President Bush will never order an invasion of Iraq.

I assume that the conclusion here is not context-sensitive. Now suppose that back in the early 1800's, Benjamin Franklin had uttered these words: "President Bush will never order an invasion of Iraq". Then I take it that the premise of iii<sub>F</sub>) expresses a truth, just by virtue of Franklin's utterance. But I am inclined to say that the conclusion of iii<sub>F</sub>) does not, by that fact alone, express a truth. There wasn't and had never been, as of Franklin's time, any such person as President Bush, nor any such country as Iraq. It perhaps doesn't follow, given this, that it is incorrect to assert of Franklin that he said Bush will never order an invasion of Iraq. Perhaps, under the following circumstances, even though there had never been a president Bush, nor any such country as Iraq, the conclusion of iii<sub>F</sub>) would express a truth: imagine that Franklin said, "Listen, I'm telling you that there will be a 41st president of our country, and in 1990 there will be a foreign country that occupies the region ... [lengthy specification of longitudes and latitudes follows that picks out the region in fact to be occupied by Iraq (pre-annexation of Kuwait)]..., and I'm telling you that he, that president-to-be, will never order an invasion of it, that country-to-be. Maybe relative to such circumstances, the conclusion of iii<sub>F</sub>) expresses a truth.

However, it seems clear to me that it does not follow, merely upon the truth of what is expressed by the premise of iii<sub>F</sub>), that what is expressed by the conclusion of iii<sub>F</sub>) is true. Then if I'm right about iii<sub>F</sub>), and moreover, corresponding instances of i) and iii) stand or fall together, then I think we should have to grant that the inference of (1) from (1'), in particular, is not valid.

It is not clear to me that instances of i) and iii) do stand or fall together, but the validity of the inferences, (1')/:(1), (2')/:(2), remains unclear to me as well.

3. I think it is plausible to claim that Witold can't be wishing that Jones will arrive on time unless he believes some things; in particular, wishing that Jones will arrive may entail believing that someone exists. If one accepts this claim, one might be tempted to infer that situations meeting Constraint 1 are not possible. For I say that Witold is only wishing, yet from the description of the case it follows that he is also believing something. But this reasoning is based on a confusion. Constraint 2 does not require that Witold lacks any beliefs at the moment; it requires only that he isn't bearing any occurrent attitudes apart from those required by that of imperative wishing. Imperative wishing does not require occurrent belief. Then if Witold is only wishing, he can't be having any occurrent beliefs. But that is not incompatible with the description of the case.

Belief and occurrent belief seem plainly to be different in this respect: it is plausible to claim that bearing the attitude of wishing or wondering (or as well any of a host of other attitudes) to a thing entails having a belief (though perhaps only a quite minimal belief, such as that something exists); bearing that same attitude to that same thing, however, does not entail occurrently believing anything.

4. It is not clear to me that there are such other occurrent beliefs that we should acknowledge that O'Brien is having in \*-situations. (Similar points apply, I believe, to the question of whether Witold is having other wishes besides the two expressed by (4) and (4'); see note on following page in the text.) The matter depends on what other analogues of (DIST<sub>1</sub>) must be accepted. One might find the following plausible, for example:

(DIST?) t is occurrently believing that Jones will arrive  
on time  
-----  
:: t is occurrently believing that someone will  
arrive on time

If (DIST?) is correct, we should allow that the following ascription also expresses a report true relative to \*-situations, in addition to (3) and (3'):

(a) O'Brien is occurrently believing that someone will  
arrive on time

However, conclusions of inferences sanctioned by (DIST?) are ambiguous and may be interpreted either de re or de dicto. Assessment of the validity of a given instance of (DIST?), then, must await disambiguation.

On one hand, if the conclusions are to be understood as de dicto ascriptions, with the quantifier 'someone' not taking wide scope over 'O'Brien is occurrently believing', then it is not clear to me that inferences sanctioned by (DIST?) are in general valid. The case is different with inferences involving non-occurrent belief. I grant that if a person believes that Jones will arrive on time, then this person may be ascribed de dicto the belief that someone will arrive on time. But with occurrent belief, I do not see that matters go the same way. I grant as well that if a person is occurrently believing that Jones will arrive, then that person may be said to believe, non-occurrently, de dicto, that someone will arrive. But that is not an entailment relevant to the inferences with which we are concerned.

On the other hand, if the ascriptions that figure as conclusions to instances of (DIST?) are to be interpreted de re, then I am inclined to think that such inferences are questionable for other reasons. Consider the parallel:

(DIST?') t is occurrently believing that Santa Claus will  
arrive  
-----  
::  $\exists x$ ( t is occurrently believing that x will arrive)

Surely, instances of (DIST?') are not in general valid. Then we should say the same for (DIST?), if the conclusions of its instances are to be interpreted de re.

5. In Note 2. it was observed that some instances of the pair

(f1') t is thinking:  $\emptyset$   
(f2') t is thinking:  $\emptyset^*$

do not imply the corresponding instances of

(f1) t is occurrently believing that  $\emptyset$   
(f2) t is wishing that it would be that you  $\emptyset^*$

And although in some cases this is due to the relevant instances of (f1) and (f2) being context-sensitive, this is not always so. One case was considered above deriving from the choice of the standard indicative, 'President Bush will never order an invasion of Iraq', for  $\emptyset$ . So there are cases where the truth of the displayed-sentence ascription does not guarantee the truth of the corresponding standard ascription. Any such case will be one where it does not suffice, for the constraint presently at issue, to require that the \*-situation analogues be ones relative to which the displayed-sentence ascription alone is true.

So I am putting a lot of weight on the present clause, and the requirement expressed loosely in it, that the claims ascriptions are to be true relative to these situations in virtue of the same bit of occurrent believing or wishing, as the case may be. In formulating Constraint 1, I avoided this (or meant to avoid it) by adding the adverbial clause, 'concerning Jones', to (1') and (2'). The resulting displayed-sentence ascriptions (clauses a. and b.) seem to me to do the trick. In general, however, I do not see any clear, principled way to produce, for any given indicative,  $\emptyset$ , a pair of displayed-sentence ascriptions that will suffice in this connection: ones that express claims such that it is enough to require that those claims be true relative to a situation, in order to impose a constraint, in the case of  $\emptyset$ , with an effect analogous to that of Constraint 1, in the case of 'Jones will arrive on time'.

Suppose, for example, that the indicative,  $\emptyset$ , selected for instantiating (RV2), contains occurrences of two proper names. Suppose  $\emptyset$  is 'Henry won't bother Laurie'. In such a case, I do not see how the addition of adverbial clauses to instances of (f1') or (f2') will do the trick. It will not do to say that the \*-situation analogues in this case are situations relative to which the claim expressed by the following is true:

- (a) Witold is thinking, concerning Laurie and Henry:  
*Let it be that Henry won't bother Laurie.*

Briefly, the problem that I see with this particular proposal is that it might be that Witold uses the name 'Laurie' for Henry, and 'Henry' for Laurie. Some such situations will be ones relative to which the claim expressed by (a) is true, though they are not ones in which Witold is wishing that Henry wouldn't bother Laurie, but rather, ones in which he's wishing that Laurie doesn't bother Henry. Plainly, similar problems would confront other appeals to instances of (f1') or (f2') with these "concerning x" modifiers.

It may be that a proposal can be fashioned that gets around this sort of difficulty by employing the concept of event-characterization introduced in the next chapter (section 9.2). For any standard indicative,  $\emptyset$ , an event of occurrent believing may be said to have the conjunctive property (" $P_{\emptyset}$ ") of being an event of O'Brien's occurrently believing that  $\emptyset$ , and as well an event of O'Brien's thinking:  $\emptyset$ . Likewise, an event of wishing may be said to have the conjunctive property (" $P_{\emptyset}^w$ ") of being an event of Witold's imperatively wishing that it would be that  $\emptyset$ , and as well an event of Witold's thinking: *Let it be that  $\emptyset$* . I believe that for each of these properties it is possible that an occurring event has it; moreover, I think that it is possible for two events, each one having one of these

properties (and not the other) to co-occur. I claim, in particular, that there are two such co-occurring events in any \*-situation; I believe this is guaranteed by the condition imposed by Constraint 1.

The idea, then, would be to require that, for the selected  $\emptyset$ , the relevant \*-analogues are situations in which

- (b) there are two occurring events, e and e', such that e has  $P_{\emptyset}$  and e' has  $P_w$ .

(the analogue of Constraint 2 will guarantee that only one of the events has each property). I believe that a precise and adequate analogue of Constraint 1 can be stated in generality along these lines. I am not sure.

6. There is a difficulty confronting my appeal to instances of

- (f1) t is thinking: *Let it be that  $\emptyset$ ,*

in stating analogues of Constraint 1. The difficulty is of the sort of problems raised in the preceding note, and has rather to do with the choice of displayed imperative.

To illustrate the problem, take  $\emptyset$  to be

- (a) No bird is noisy

In this case, I do not believe that the problems discussed in the preceding note arise in stating an analogue of Constraint 1. I am inclined to think that it suffices to say, in O'Brien's case, that the relevant \*-situation analogues are ones relative to which the following expresses a truth:

- (b) O'Brien is thinking: *no bird is noisy*

For I take it that (b) implies

- (c) O'Brien is occurrently believing that no bird is noisy.

and also that (b) is compatible with what would be the counterpart of Constraint 3 in this case: that O'Brien does not have an occurrent belief stronger than any required by (c). (For this notion of an occurrent belief (or wish) being stronger than another, see discussion of Constraint 3 in the text.) And I suppose that, in general, if i) an instance of

- (f2') t is thinking:  $\emptyset$

or

(f3') t is thinking:  $\emptyset^*$

(substituends of ' $\emptyset^*$ ' being imperatives) implies the corresponding instance of

(f2) t occurrently believes that  $\emptyset$

or

(f3) t is wishing that it would be that  $\emptyset$ ,

and in addition, ii) the instance of (f2') or (f3') is compatible with the counterpart of Constraint 3--if it does not require an occurrent belief or wish stronger than any required by the corresponding instance of (f2) or (f3), as the case may be--then to express a constraint (for the relevant substituend of ' $\emptyset$ ') whose effect is parallel to that of the a. or b. clause of Constraint 1 (for the indicative, 'Jones will arrive on time'), it will suffice to require that the instance of (f1') or (f2') at hand expresses a truth relative to the \*-situation analogues at issue.

But it is perhaps not clear, for any indicative,  $\emptyset$ , whether the constraint in Witold's case can be expressed by an instance of (f1). In particular, it may be questioned whether

(d) Witold is thinking: *Let it be that no bird is  
noisy.*

implies

(e) Witold is wishing that it would be that no bird is noisy.

I am inclined to think that there is at least one available interpretation of (d) on which it does imply (e), but this inclination, and the inclination to hold, more generally, that instances of (f3) are implied by corresponding instances of (f1), may be questioned.

It may be claimed that, strictly speaking (modulo the difficulty of the preceding note), instances of (f1) imply, not the corresponding instances of (f3), but rather the corresponding instances of

(f4) t is wishing that you will let it be that  $\emptyset$

The contention would be that, taken strictly and literally, imperatives of the form

Let it be that  $\emptyset$

should be understood to involve the reading of 'let' that is



involved in literal interpretations of indicatives of the form

t will let it be that  $\emptyset$ .

The problem then is that, strictly speaking, the claim expressed by (d) with respect to a context, c, would imply the claim expressed, with respect to c, by

(f) Witold is wishing that it would be that you let it be the case that no bird is noisy.

but not that expressed by (e). If this contention is right, then the conclusions of the relevant instances of  $LA_{\emptyset}$  and  $AST_{\emptyset}$  will not conflict with  $(RV2_a)$ . For there would be some situations satisfying the analogues of Constraints 1 - 3 relative to which the claim expressed by (e) is false. Consequently,  $(RV2_a)$  will not yield, concerning all such situations, that there is a proposition (that no bird is noisy) such that O'Brien is occurrently believing it, and Witold is wishing it.

It seems to me, too, that if the present objection to employing instances (f1) is correct, then we cannot employ those instances in formulating analogues of Constraint 1 along the lines suggested at the end of the preceding note. Employing the instance of (f1), got with (a) in for ' $\emptyset$ ', that proposal would require that the relevant \*-situation analogues be situations where

(g) there is an occurring event that is both an event of Witold's wishing that it would be that no bird is noisy, and as well, an event of Witold's thinking: *Let it be that no bird is noisy.*

I am inclined to think that at least on one interpretation this expresses a claim that is possibly true and compatible with the relevant analogues of Constraints 2 and 3. But if the present line of objection is right, and (d) does not imply (e), then I think we should have to say that there couldn't be any single occurring event that has this conjunctive property, at least not in situations that also meet the analogues of Constraints 2 and 3. For the analogue of Constraint 3 will require that the strongest thing Witold is imperatively wishing in such situations is (intuitively put) the wish that no bird is noisy. But if there is an occurring event of Witold's wishing that someone (referent of 'you') would let it be that no bird is noisy, then there is this other wish--(intuitively put) the wish that you would let it be that no bird is noisy--that is independent of the previous one; neither one is a stronger wish than the other.

Two responses to this line of questioning do not seem to me satisfactory. One might dismiss the problem, claiming

that it is clear enough which imperative wishes are supposed to be captured by requirements formulated using instances of (f1): the ones reported by instances of (f3). But it seems to me that this just begs the line of questioning at issue. The contention at hand is that instances of (f1) do not imply corresponding instances of (f3). If that claim is right, then whether or not one "gets the idea" of which constraints I want by employing instances of (f1), those constraints are not, strictly speaking, expressed by those appeals. I am interested in how, strictly speaking, those constraints may be expressed.

Another response might be to claim that (f) itself implies (e) (and more generally, that instances of (f4) themselves imply corresponding instances of (f3)). I don't think that from the fact that I am occurrently believing that you will let it be the case that one bird escapes, that I am occurrently believing that one bird will escape (though I think it would follow that I believe this). And I doubt too that it follows from the fact that I am wishing that you would let it be that no bird is noisy, that I am wishing that it would be that no bird is noisy (though, it perhaps does follow that I desire this). On the discrepancies noted here between belief and occurrent belief, and between desire and (occurrent) wishing, see notes 3. and 4. above. Also, this response would leave us with the obstacle discussed just above for the proposal I offered at the end of the previous note: even if (f) implies (e), it presumably requires a wish stronger than any required by (e). Then there won't be any situations (not possible ones anyway) that conform to the analogues of Constraints 2 and 3, yet at which any event is occurring that is one of Witold's wishing that it would be that no bird is noisy and also one of Witold's thinking: *Let it be that no bird is noisy.*

Perhaps it is not possible to find, for any standard indicative, some displayed-imperative ascription that serves to express the desired condition on situations (along the lines of clause b. of Constraint 1). Similar problems would arise in connection with other imperative forms that one might employ in this connection: for example, 'See to it that  $\emptyset$ ', 'Make it the case that  $\emptyset$ ', 'Bring it about that  $\emptyset$ ', etc. Perhaps the Yiddish form, [ that  $\emptyset$  ], for subjunctive  $\emptyset$  (as in 'That a radish grow on your navel, God forbid') would work. I believe that French allows such constructions in ordinary usage, and that the sentence [ Que  $\emptyset$  ] for (French) subjunctive  $\emptyset$ , serves just the called for function, of expressing an imperative wish. If such forms are to be found in French and happen not to have proper translations in English, perhaps it would not be unwarranted to appropriate instances of (f1) (or one of the other forms just cited) for the purpose.

At any rate, there are very many cases where displayed-sentence ascriptions (instances of (f2') and (f3')) are available which imply the corresponding instances of (f2)

and (f3) (surely, clauses a. and b. of Constraint 1 constitute one case among very many relevantly similar cases). In all of these many cases, analogues of Constraints 1 - 3 can be formulated, and \*-situation analogues can be specified consideration of which motivates analogues of LA and AST that are just as compelling as the originals. Reflection on this fact by itself, it seems to me, should provide some grounds for allowing that if LA and AST are to be accepted, then we may doubt whether there is any standard indicative,  $\emptyset$ , such that the instantiation of (RV2) for  $\emptyset$  expresses a truth.

7. This formulation is not quite adequate in the case of ambiguous sentences. I don't think that the added complexity required to accommodate such cases (by making the parameter of interpretation explicit) is necessary for our purposes. So the present statement should be understood to be restricted to the case of unambiguous indicatives. The same point holds for (20) and for my formulation of Thesis 3, both further on in the text.

## CHAPTER 9

### AN ALTERNATIVE: THOUGHTS AS TYPES OF EVENT

#### 9.1 A Fable About R\*SS\*LL's Step

Once it is definitely recognized that the proposition is...not a belief..., but an *object* of belief, it seems plain that a truth differs in no respect from the reality to which it was supposed merely to correspond.

G.E. Moore<sup>1</sup>

In Chapter 1, I alluded to an old argument dating back to Frege, Moore and Russell, designed to show that we cannot take 'thought'--used as a common noun in the sense that has been of concern to us throughout this study--to stand for concrete events of thinking, to stand, that is, for events of particular persons' doing some thinking.

It needn't be denied that there is a usage of 'thought' on which the term does stand for particular events of thinking. But on that usage, it couldn't be said that your thought and my thought were the same. For what 'your thought' denotes, on that usage, is an event involving you and not me as subject, whereas the thing denoted by 'my thought', on that usage, is an event involving me and not you. Since you and I are distinct, so are our thoughts, on that usage of 'thought'.

Let us reserve the phrase, 'shareable sense', for the sense of 'thought' that has been our principal concern in this study, the sense in which the term stands for items

that you and I may be said to have or be thinking in common, in virtue of having or thinking the same thought. (Strictly speaking it hasn't been ruled out that there are many such "shareable" senses of the term 'thought', but for ease of exposition, let me set this point aside and suppose that there is only one such sense; the policy will not jeopardize any of the main points I wish to make.) Concrete events of thinking themselves do not seem to be items of the sort to which the common noun, 'thought', applies in this shareable sense. That is the thrust of the old argument. Then what sort of items are the things that we refer to when we speak of 'thoughts' in the shareable sense? The Propositional Tradition proposes a particular answer to this question, and I wish to turn now to consider how certain followers of that tradition may have arrived at their answer.

I have used the term, 'circumstance', at various points in the study so far, on what I think is a fairly familiar and tolerably clear usage: for example, I have spoken of circumstances in which someone did something or other, or in which such and such an event took place, or circumstances relative to which this or that claim is true, etc. I've also used 'situation' to stand for things of the same sort; some might use instead the phrase "state of affairs" for the kind of items I have in mind. Although this ordinary usage of "circumstance" has been clear enough for purposes so far, let me briefly say something further at this point concerning the sort of thing intended.

I take circumstances to be abstract items, ways for things to be--at least some of which may be taken to be represented by sets of possible worlds. For example, circumstances of my now having a good time may be represented by sets of worlds whose members all include me having a good time presently. Circumstances may be said to obtain or be actual--I use the predicates 'obtains' and 'is actual' interchangeably--but a circumstance's obtaining or being actual should not be confused with its existence. I assume that there are (that there exist) circumstances that do not obtain (aren't actual): circumstances that are "merely possible". If a circumstance is taken to be represented by a set of possible worlds, we may say that it obtains or is actual iff the actual world is one of its members. I have reservations about whether circumstances are properly represented along these lines, in terms of possible worlds. There are other conceptions that have been proposed that expand the notion of circumstance to include ways for things to be that are not possible (and that, accordingly, are not well represented by any sets of possible worlds).<sup>2</sup> However, I do not think that the main points I wish to make in what follows hinge on this question.

There is a sense in which a circumstance may be said to be the content of thoughts of various sorts: an occurrent belief, wish and question may be said to have one and the same circumstance as their common content. Loosely, the

content of a thought is the circumstance that the thought may be said to concern or be about. For example, if I am thinking that Jones will arrive on time, my thought (at least one thought I am having) is about the circumstance of Jones' being such that he will arrive on time; if you are wishing that Jones would arrive on time, your thought (the wish, or at least one wish, you are having) concerns that same circumstance. There are problems with this characterization of content,<sup>3</sup> but for purposes at hand, perhaps I may assume that the reader has an acceptable idea of what it is for a circumstance to be the content of a thought, whether an occurrent belief, a wish, a question, or an "object" of any other attitude. At any rate, I shall proceed with this assumption, and with the assumption, as well, that in examples to be discussed, it will be clear with respect to given thoughts, which circumstances are the contents of those thoughts in the relevant sense.

The fact is that many philosophers of the Propositional Tradition have supposed that what we mean by "thoughts", when we use the phrase in the shareable sense, just are circumstances (or some might rather use one of the terms, 'proposition' or 'state of affairs', intending by it, however, the same sort of thing as I here intend when I speak of circumstances). In fact their view would be that a given thought just is that thought's content. It may seem odd to identify a thought with anything that that thought itself could be said to concern or be about; I find it

counterintuitive. Nevertheless, it is pretty easy to see the plausibility in such a proposal. Here is a fable about how a philosopher might have arrived at this view.

### 9.1.1 The Fable

There once was a famous philosopher named "R\*SS\*LL". Having seen quite clearly that thoughts could not plausibly be identified with concrete events of thinking, R\*SS\*LL made the following observation: "Take any two acts of judging" ('judging' was his technical term for occurrent believing, and he commonly counted events of occurrent believing as acts) "and suppose that, in virtue of engaging in those particular acts, the subjects may properly be said to be thinking the same thing. Then plainly," R\*SS\*LL observed "on any such occasion, we should want to say that the thought these two have in common concerns the same fact". ('fact' was R\*SS\*LL's term for what I have been speaking of as "circumstances", for what his friend W\*ttg\*ntg\*n spoke of as "states of affairs".) "Suppose, for example," R\*SS\*LL proceeded "that our two subjects are both judging that Mt. Blanc has many snowfields. This would be a case where we should say they are thinking the same thing. But then surely, we should also say that their common thought concerns the same fact, namely the fact of Mt. Blanc's having many snow fields."

"But," R\*ss\*ll continued, "let us now go in the other direction. Suppose that our two thinkers are having



thoughts that could be said to concern the same fact. Isn't it clear that in any such case it will be correct to say that they are thinking the same thing, having the same thought? Suppose for example, that both are wishing to know whether Scott authored Waverly. Here is a case where we should be inclined to hold that their thoughts concern the same fact, namely that of Scott's authoring Waverly. But then plainly this is also a case where we should say that they are thinking the same thing, having the same thought."

"It is apparent, then" R\*SS\*LL concluded, "that for any two acts of thinking, the subjects may be said to be thinking the same thing just in case what they are thinking concerns the same fact. Then we might as well equate the thought that a person has (though not to say the particular act of thinking in which the person is engaged) with the fact that the person's thought concerns or is about."

With this lead set by R\*SS\*LL, all philosophers following in his footsteps (keep in mind that this is a fable), arrived very naturally at the central tenets of the Propositional Tradition. If one assumes that the things occurrently believed are in general truth-valued, and moreover, one follows R\*SS\*LL in identifying thoughts with contents, one will be led to the conclusion that circumstances, at least those that are the contents of occurrent beliefs, are true or false thoughts--hence propositions. And since it is plausible to suppose that if

a circumstance is the content of an occurrent belief it may also be the content of what one is thinking when one is wishing or wondering, hoping or doubting, etc., it will be natural to conclude as well that circumstances--propositions--are the "objects" of all the attitudes.

Philosophers were led, this way, to the two component principles of the Received View. Since it is plausible to think that any circumstance that is the content of an occurrent belief, is as well the content of a wish, and a question, if one is identifying contents with what is occurrently believed, wished or wondered, one will be led straight-away to (RV1). More specifically, the content of what one is occurrently believing, wishing, or wondering, when one is occurrently believing that  $\emptyset$ , wishing that it would be that  $\emptyset$ , or wondering whether  $\emptyset$ , will be the very same circumstance, what R\*SS\*LL would have spoken of as "the fact that  $\emptyset$ " (let me set aside R\*SS\*LL's troubles that arose concerning cases where it is not a fact that  $\emptyset$ ). Thus, if one is inclined to identify this circumstance with the proposition that  $\emptyset$ , one arrives straight-away at (RV2).

Plainly, all this still leaves open the question of what sort of things propositions are; circumstances, of course (or states of affairs, R\*SS\*LLian facts, situations; choose your phrase), but what sort of thing are these? Proposals varied in response to this latter question, with concomitant variation in proposals as to the nature of propositions. There was the old R\*SS\*LLian view according

to which propositions--"facts"--are complex entities, each an arrangement of an object and property (or of several objects under a relation), the object and property (or objects and relation) being counted as constituents of the fact. More recently, the concept of possible worlds has been employed in explicating the nature of propositions. Thus, philosophers have suggested that we view propositions as sets of possible worlds, or as functions from worlds to truth-values. Others have proposed to take propositions as "intensional relations" of a certain sort: 0-ary ones. Still, the conception of propositions as things akin to what I mean by "circumstances" has been the leading idea. All of these accounts, in their own ways, have proved to be fruitful and promising proposals concerning propositions, and consequently--so it was supposed--of thoughts in general. Here the parable ends.

#### 9.1.2 R\*SS\*LL's Step

What I wish to highlight in this fable is a certain step that R\*SS\*LL and all his followers made--I shall refer to it as "R\*SS\*LL's step". I believe that this step, or one closely analogous to it (concerning specifically belief), is implicit in G.E. Moore's remarks that I quoted at the head of this section. It is the step of supposing, upon noting that the term 'thought', in its shareable sense, cannot plausibly be held to apply to particular concrete events of occurrent believing (or wishing, or wondering, etc.), that

the term must apply rather to contents--to items that we would, intuitively speaking, say the thoughts are about, or concern (that the term applies to things in significant respects akin to what I mean by 'circumstance': R\*SS\*LL's complexes, or sets of possible worlds, or functions from sets of worlds to truth values, etc.)

If one has one's attention focussed exclusively on the case of belief (or occurrent belief), R\*SS\*LL's step has some plausibility. For as R\*SS\*LL noted (in effect), the following expresses a truth:

- (1)  $\forall x \forall x' \forall y \forall y' \text{ nec} ( \text{if } x \text{ is occurrently believing } y, \text{ and } x' \text{ is occurrently believing } y', \text{ and } y \text{ and } y' \text{ have the same content, then } \exists z ( x \text{ is thinking } z \text{ and } x' \text{ is thinking } z ) )$

Restricting attention to the case of occurrent belief, it seems indeed to be the case that two persons are bearing this attitude to things that have the same content--that concern the same circumstance--iff these persons may be said to be thinking something in common, sharing a thought. There is, then, an equivalence, at least in the case of occurrent belief, between sharing a belief and having beliefs with the same content.

In fact, it is plausible to think that the same point can be made, mutatis mutandis, concerning many occurrent attitudes: whenever one person is, for example, imperatively wishing a thing,  $x$ , and another person is imperatively wishing an item,  $x'$ , if  $x$  and  $x'$  may be said to

have the same content--to concern the same circumstance-- then it is plausible to say that the two persons are thinking something in common--sharing a thought. An analogous claim can be made concerning the occurrent attitude of wondering. For any one of a host of occurrent attitudes, it will be plausible to claim that the attitude satisfies (for 'A'):

(2)  $\forall x \forall x' \forall y \forall y'$  nec( if A(x,y) and A(x',y'), and y and y' have the same content, then  $\exists z$ ( x is thinking z and x' is thinking z ))<sup>4</sup>

If sharing thoughts and sharing contents are equivalent in these single attitude cases, it may seem quite natural to suppose that the thought shared just is the shared content. And in fact, philosophers working within the Propositional Tradition commonly have restricted their attention to cases in which a single attitude is in question, especially in discussions where the nature of "objects" of the attitudes was at issue. As I have noted before, it has been a commonplace in that tradition to attend solely to the case of belief, and to suppose that the results arrived at in the case of that attitude apply as well to the case of all other attitudes.

What should we make of R\*SS\*LL's step? Since it leads directly to some of the central tenets of the Propositional Tradition, and since I believe that we should take seriously the doubts that were raised concerning those tenets in the

preceding chapter, I am inclined to think that we ought to question R\*SS\*LL's step. The arguments of the preceding chapter suggest that in cases involving two persons bearing any pair of our three attitudes of occurrent believing, wishing and occurrent wondering, the apparent equivalence of shared thought and shared content breaks down. In cases where one person is bearing one of those attitudes, and only bearing it, and the other is bearing another of those attitudes, and only bearing that attitude, then whether or not any of the things these two are thinking have the same content, it will be counterintuitive to claim that they are thinking anything in common. Yet if we were to follow R\*SS\*LL's step concerning cases where there is a content had in common, we would be led to claim that the two persons are thinking something in common. It seems to me, then, that we should think twice about taking R\*SS\*LL's step.

Fortunately, R\*SS\*LL's step is not forced on us; there are other items that 'thought' may plausibly be taken to refer to, in its shareable sense.

## 9.2 The New Category

The question is: what are the things we correctly speak of having, when we correctly speak of having thoughts? What are the things persons may properly be said to be <sup>gen</sup>thinking? One could say, simply, "thoughts", and suppose, moreover, that there isn't any other natural, ontological category to which thoughts may be subsumed.

This was not R\*SS\*LL's view. When R\*SS\*LL proposed that we take thoughts to be facts, he was proposing, concerning a certain category of items that he had independent reasons to acknowledge, that thoughts should be understood to be things of that category. However, as we've just seen, any view that identifies thoughts with their contents will be subject to the same sort of doubts that were raised in the preceding Chapter against (RV2). In the remaining sections of this chapter, I wish to develop an alternative to R\*SS\*LL's proposal. But I shall follow R\*SS\*LL at least in this respect: there is a certain category of items that I think we have independent reason to acknowledge, and I shall claim that thoughts should be understood to be things of that category. These things, I believe, prove to be a better choice than contents for the sort of items we speak of when we speak of thoughts in the shareable sense. In the present section, I shall lead up to a claim concerning which category of items is in question here, by introducing a battery of concepts and assumptions that will be important in subsequent development.

### 9.2.1 Characterization

I propose to use the phrase "noetic event" for any event,  $e$ , such that for some person (or thinking thing of some other sort),  $x$ , and some thought,  $y$ ,  $e$  is an event of  $x$ 's  $gen$ thinking  $y$ .<sup>5</sup> (Hereafter, I shall take "e" variables to range solely over events.) Before discussing this

concept, I would like to address a few important background matters. I have been using the gerund, 'gen<sup>en</sup>thinking', as a common noun applying to any event of a person thinking something, but it is not clear to me that all events fitting this description are noetic events. Perhaps there are, so to speak, existentially quantified events--such a thing, for example, as an event of Sarah's thinking something, though not an event that could be said, for any thought, to be an event of Sarah's thinking it. If there are such events, they fit the description of gen<sup>en</sup>thinkings, but not of noetic events.

This way of characterizing noetic events places a lot of weight on the idea that an event may be said to be an event of x's gen<sup>en</sup>thinking y, for given x and y. In preceding discussions, I have frequently appealed the notion of an event's being one of  $\emptyset$ -ing, where " $\emptyset$ -ing" is some gerund or gerundive clause ("an event of kicking a football", "an event of my dispatching my chore for the day", etc.). I believe that the notion in question here may be understood to involve a relationship between events and properties, and I would now like to attend to that relation more directly.

When we employ an ascription of one of the forms

(F1)                    e is an event of  $\emptyset$ -ing, or

(F2)                    e is an event of t's  $\emptyset$ -ing

(where substituends of ' $\emptyset$ -ing' are gerunds, and substituends of 't's' are noun phrases in their possessive forms), I take



it that we ascribe a certain sort of property to the event denoted by the substituend of 'e'. And I suppose that when we refer to an event using a gerundive clause of the form:

t's  $\emptyset$ -ing

we presuppose that the event referred to has a property of the sort in question; in using such a term, we presuppose that the event is an event of t's  $\emptyset$ -ing. One way to understand what is being presupposed here, and what is asserted of events when we employ instances of (F1) and (F2) is as follows.

I suggest that in characterizing an event as one of  $\emptyset$ -ing (or of t's  $\emptyset$ -ing), we assert a particular relation between the event in question and the property of  $\emptyset$ -ing (or of being such that t is (or are)  $\emptyset$ -ing). Actually, I take it that in certain cases the relation in question holds, rather, between an event and a relation (for example, in saying that an event is one of hitting we assert a relation between this event and the relation of hitting, in saying that an event is one of giving we assert a relation between the event and the relation of giving). In stating assumptions and principles in what follows, though, just for ease of formulation, I shall disregard these cases. Another matter of convenience: instances of (F2) may contain plural possessive noun phrases and quantifier expressions as substituends for 't's', but in discussions to follow, I

shall usually set aside consideration of such cases and attend to instances of (F2) in which the possessives of singular referring terms are substituends for 't's'. I think the discussions will be clearer for it, with no central points for our purposes jeopardized by the practice.

So, I am assuming in what follows that if there is a property expressed by the verb phrase [is  $\emptyset$ -ing], there is a property denoted by the corresponding singular terms:

[the property of  $\emptyset$ -ing]

[the property of being such that t is  $\emptyset$ -ing]

for singular term, t, and gerund  $\emptyset$ -ing. (I am adopting one further practice out of convenience here: the "ing" forms figuring in the present progressives of verbs--as in "is  $\emptyset$ -ing"--are normally referred to as present participles, whereas the "ing" forms figuring in instances of (F1) and (F2), and in instances of the two schemas for property terms just cited, are normally referred to as gerunds; but I shall ignore the distinction of participle and gerund in what follows, and speak of "gerunds" in both sorts of case.)

As I see it, there are actually any number of relations that satisfy instances of:

R holds between an event, e, and the property of  $\emptyset$ -ing (of being such that t is  $\emptyset$ -ing) just in case the event is an event of  $\emptyset$ -ing (of t's  $\emptyset$ -ing)

for the variable 'R', where substituends for ' $\emptyset$ -ing' are suitable gerunds (each one, G, such that [is G] expresses a

property). But I propose to assume that there is just one of these many relations that is expressed when we use ascriptions that are instances of (F1) and (F2) in characterizing events.

I shall refer to the relation in question here as that of "characterization", and shall appropriate the various forms of the verb, 'characterizes', taking them to express the relation. So I take the following to express truths (for suitable gerund,  $\phi$ -ing):

[ nec  $\forall e$ ( the property of  $\phi$ -ing characterizes e iff e is an event of  $\phi$ -ing ) ]

[ nec  $\forall e \forall x$ ( the property of being such that x is  $\phi$ -ing characterizes e iff e is an event of x's  $\phi$ -ing ) ]

I do not claim that adopting this view of matters is of direct help in finding informative, necessary and sufficient conditions under which the things expressed by instances of (F1) and (F2) are true. But I do think that positing this relationship of characterizing will make it easier to formulate such proposals, and will allow us to consider questions concerning such proposals--and other proposals concerning the concepts expressed by instances of (F1) and (F2)--in a more regimented and perhaps more tractable fashion.

It should be borne in mind when considering assumptions that I claim govern the relation of characterization that ultimately they should be tested against intuitions we have

concerning a relation expressed when we speak of an event being an "event of  $\emptyset$ -ing", or an "event of t's  $\emptyset$ -ing"; I don't mean to supplant this concept, only to regiment it.<sup>6</sup>

### 9.2.2 Some Features of Characterization

One feature of the relation of characterization is that events cannot bear it to just any property. I have not been able to find a precise way, though, to mark off those properties that can from those that cannot characterize events. Intuitively, there is a distinction to be made between event properties and properties of other sorts that might be thought to be of help in the present connection. Let us say that a thing engages in an event according to

(D12)        x engages (is engaging) in e =df x is a subject  
                 of e and e occurs (is occurring)

Then, roughly, an event property, P, may be said to be one such that for any x, if x has P, then in virtue of x's having P, x is engaging in an event. Doing a sprint, exhaling, occurrently believing that politicians lie and cheat are all examples of event properties; being wise, being malleable, believing (not occurrently) that politicians lie and cheat are not. And the first three properties just cited can indeed characterize events, whereas the latter three cannot. We might say, rather, that the latter three characterize states--there are states of being wise, states of being malleable, states of belief, but

no events can be characterized these ways. In general, it seems that if a property does fit the intuitive specification of event properties just given, then it can characterize events.

These observations might lead one to think that a property can characterize an event iff it is an event property. But on the conception of characterization proposed here, there are plenty of non-event properties that can characterize events. Vacuous properties such as being such that Sarah is running, being such that O'Brien is occurrently believing something, being such that Jones is dancing the Boogaloo--all such properties by which, I claim, we characterize events when we employ instances of (F2)--are not intuitively event properties. After all, the number two may be such that Sarah is running, but it wouldn't, in virtue of that, be the subject of any event. So such a distinction between event and non-event properties does not seem to be immediately helpful in drawing a line between those properties that can and those that cannot be said to characterize events.

Could we say that for any property that can characterize an event, either it is an event property or else it is a property, P, such that for some x and some event property, P', P = the property of being such that x has P'? But an event may be properly characterized, for example, as one of somebody's doing the wash in the sink. When this is the case, I would claim, we correctly assert



doesn't follow from this alone that if I have R, e itself is occurring. e may be some event that occurred in Amherst in 1987, but I may have R in virtue of engaging in some event of running five miles in Seattle in the Summer of 1990. Surely we shouldn't say that e itself is then occurring.

I am inclined to think that an event's occurrence is "subjunctively" conditioned by the subject's having a property that characterizes the event:

(3)  $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow ( \text{if } e \text{ were occurring, the subject of } e \text{ would have } P ) )$

However, it is not clear to me that strict conditioning holds:

(4)  $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow \text{nec}( e \text{ is occurring} \rightarrow \text{the subject of } e \text{ has } P ) )$

We shall consider a case in the next subsection that has led me to question the thesis formulated in (4).

Upon reflection, I think it is pretty clear that the three grades of conditioning expressed in the consequents of (A10), (3) and (4) are not themselves sufficient conditions for characterization. That is, if we replace the main conditionals in these formulations by their converses, the resulting formulations do not express truths. For simplicity, let me refer to the claims expressed by these as the "converses" of (A10), (3) and (4). Consider the converse of (A10): suppose that there is an event

characterized by my running that is occurring at this moment, and suppose too that I am presently thinking something. Then the claim that this event of my running is occurring materially implies that I have the property of thinking something. But surely we should not want to say that this event of my running is an event of thinking something. Then we should not accept that the property of thinking something characterizes e. So the converse of (A10) should be rejected.

Examples concerning events that are inessential but regular accompaniments of one another defeat the converse of (3). It might so happen that any likely event of my working on the dissertation is such that were I to engage in it, I'd also be drinking coffee. But no event of working on this dissertation is any event of drinking coffee, no matter how likely it is that my working will be accompanied by coffee-drinking--the event of working is not characterized by the property of drinking coffee. So the converse of (3) fails.

Examples concerning properties that cannot characterize events clearly defeat the converse of (4). Anyone who is occurrently believing that Jones will arrive, believes that Jones will arrive. But there are no events of (non-occurrently) believing that Jones will arrive, so no event of occurrently believing that Jones will arrive is an event of believing that she will. I am not sure whether an amended version of the converse of (4), with 'P' restricted to properties that can characterize events, is to be



accepted or not. That seems to me a difficult question. Roughly, the question is: suppose an event  $e$ , and the property of  $\phi$ -ing, are such that necessarily  $e$  occurs only when its subject is  $\phi$ -ing, and suppose too that there are events that may be said to be events of  $\phi$ -ing (i.e., that the property of  $\phi$ -ing is one that can characterize an event); does it follow, concerning any such case, that the event in question is an event of  $\phi$ -ing? I don't know.

We may formulate a certain thesis of event identity by appeal to the concept of characterization. For we can ask whether it is the case, roughly put, that if  $e$  is an event of  $\phi$ -ing, and  $e'$  is an event of  $\phi'$ -ing, and  $\phi$ -ing and  $\phi'$ -ing are different properties, then  $e$  and  $e'$  are different events. We may ask, in other words, whether the following expresses a truth:

(5)  $\text{nec } \forall e \forall e' ((P \text{ characterizes } e \ \& \ P' \text{ characterizes } e' \ \& \ P \neq P') \rightarrow e \neq e')$

I am very much inclined to think that the thesis formulated here is false. For it seems to me that some events of hitting someone, for example, are events of punching someone. In fact, I'd be inclined to say that any event of punching someone is an event of hitting someone. I do not have any arguments to offer for this particular contention, and it does conflict with certain extant accounts of event identity.<sup>7</sup> However, it is surely the case that the property of punching someone and the property of hitting someone are

distinct. Then if it is at least possible that there is an event of punching someone that is also an event of hitting someone, it will be the case concerning a pair  $\langle e, e' \rangle$ ,  $e = e'$ , that this pair satisfies the antecedent of (5) but fails to satisfy its consequent. Some cases that seem to me to provide further counterexamples along similar lines concern events of persons bearing intentional attitudes. We shall come to this matter below, in section 9.5.

Although I consider it plausible to hold that events of punching someone are events of hitting someone, I do not think that a proper generalization is to be derived here from the observation that punching someone entails hitting someone. I do not suppose that anytime a property,  $P$ , entails a property,  $P'$ , then any event characterized by  $P$  will be characterized by  $P'$ :

$$(6) \quad \text{nec } \forall P \forall P' ( \text{nec } \forall x ( x \text{ has } P \rightarrow x \text{ has } P' ) \rightarrow \text{nec } \forall e ( P \text{ characterizes } e \rightarrow P' \text{ characterizes } e ) )$$

As in the case of the converse of (4), counterexamples here derive from the fact that not all properties are ones that can characterize events. As in that case, if the claim is amended so as to concern solely properties that can characterize events, the resulting claim is still not one that I am confident is correct.

Another question that can be asked by appeal to this concept of characterization: is an event essentially characterized by any property that in fact characterizes it?

In other words, does the following formulate a truth?

(7)  $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow \text{nec}( e \text{ exists } \rightarrow P \text{ characterizes } e ) )$

The claim expressed here is quite close to that expressed by (4). In fact, in the presence of (A10)--which I accept--and a few other natural assumptions, (4) can be derived from (7).<sup>8</sup> As I noted, we shall shortly discuss a case consideration of which leads me to question whether the thesis formulated in (4), and consequently that expressed by (7), should be accepted.

Finally one last matter before turning to consider some assumptions specifically concerning noetic events. Perhaps there are conjunctive events, events that may be said, in some sense, to "conjoin" other events. So, for example, perhaps there is an event of Moe and Larry's hitting Curly that conjoins an event of Moe's hitting Curly and an event of Larry's hitting Curly. Should we say that the properties characterizing the "conjuncts" in such cases characterize the conjoining event as well? I doubt that reflection on our ordinary usage of instances of (F1) or (F2) can be expected to yield firm intuitions on this matter.

Nevertheless, I propose to assume that if a property characterizes a conjunct of an event,  $e$ , then that property may be said to characterize  $e$  itself iff it characterizes each of  $e$ 's conjuncts:

(A11)  $\text{nec } \forall e \forall P ( \exists e' ( e' \text{ is a conjunct of } e \ \& \ P \text{ characterizes } e' ) \rightarrow ( P \text{ characterizes } e \text{ iff } \forall e' ( e' \text{ is a conjunct of } e \rightarrow P \text{ characterizes } e' ) ) )$

As an illustration, imagine that Larry is hitting Curly and Moe is hitting Larry. I take it that in at least some such situations, there is an event, call it "L", of Larry's hitting Curly that is occurring and is not an event of Moe's hitting Larry. I also suppose that in some such situations in which L is occurring, there is also an event, call it "M", of Moe's hitting Larry that is not an event of Larry's hitting Curly. It seems to me that some such situations are possible. Now let us suppose further that in some (any?) situations in which L and M are occurring, there is an event, LM, that conjoins these and only these two events, L and M. I take (A11) to guarantee that the property of hitting someone characterizes LM. For it seems to me that we should allow that any event that is either an event of hitting Larry or an event of hitting Curly is an event of hitting someone. Then the property of hitting someone characterizes both L and M. But then by (A11), LM is so characterized as well. So we may say that LM is an event of hitting someone. This seems acceptable. But according to (A11), we cannot say that the property of being such that Moe is hitting Larry characterizes LM, for by hypothesis, one of the conjoined events, L, is not characterized by this property.

There may be some regimentation imposed by (A11) that is not supported by any features to be discerned by reflection on our ordinary usage of instances of (F1) or (F2). But I am presuming this regimentation when I say that a noetic event is an event of x's <sup>gen</sup>thinking y, for given x and y, and this presumption will have to bear some weight in what follows; so we shall proceed with (A11).

### 9.2.3 Noetic Events

I shall use lambda expressions of the form

$$\lambda v_1 \dots v_n [\emptyset]$$

(where variables go in for 'v1', ..., 'vn', and sentences for '∅') as terms denoting properties and relations. If the variable, v, isn't free in ∅, read [  $\lambda v[\emptyset]$  ] as "the property of being such that ∅". Then 'noetic event' may be defined as follows:

(D13) e is a noetic event =df  $\exists x \exists y (\lambda z [x \text{ is } \text{gen} \text{ thinking } y] \text{ characterizes } e)$

I assume that there are noetic events--that there are events each of which may be characterized as an event of x's thinking y, for particular thinking thing, x, and thought, y. It seems to me that in any familiar circumstance in which it would be correct to say that someone is thinking something we are supplied with an example of such an event.

I wish to discuss some assumptions that I take to govern the concept obtained from (D13). All of these

assumptions may be seen, in effect, as placing constraints on the relation of characterization when its domain is restricted to properties of particular persons <sup>gen</sup>thinking things.

In light of (D13), every noetic event,  $e$ , may be associated with an  $x$  and a  $y$  such that  $\exists z[x \text{ is } \textsuperscript{gen}\text{thinking } y]$  characterizes  $e$ . Let us consider some features of this association. I assume that for any noetic event, a thing,  $x$ , is such that the event is characterized by  $x$ 's thinking something iff  $x$  is a subject of that event:

(A12)      nec  $\forall e( e \text{ is a noetic event } \rightarrow$   
 $\forall x( \exists y( \exists z[x \text{ is } \textsuperscript{gen}\text{thinking } y] \text{ characterizes } e )$   
 $\text{ iff } x \text{ is a subject of } e ) )$

I also assume that every noetic event has at most one subject:

(A13)      nec  $\forall e( e \text{ is a noetic event } \rightarrow \forall x \forall y( ( x \text{ is a}$   
 $\text{ subject of } e \ \& \ y \text{ is a subject of } e ) \rightarrow x = y ) )$

Against this it might be suggested that there are conjunctive events satisfying the definiens of (D13), and that some of these should be said to have more than one subject. So, for example, for two noetic events, one an event, say, of Moe's thinking that Curly is an ignoramus, the other of Larry's thinking that Curly is an ignoramus, perhaps there is a single event that conjoins these two. Let " $T_C$ " denote the thought that Curly is an ignoramus, " $L^*$ " denote the event of Larry's thinking  $T_C$ , and " $M^*$ " denote the

event of Moe's thinking  $T_C$ . And let us suppose that there is an event that conjoins  $L^*$  and  $M^*$ , call it " $LM^*$ ". Perhaps it should be claimed of  $LM^*$  that it has both Moe and Larry as its subjects. Then don't we have in this case a noetic event with more than one subject?

I am inclined to think not, for I am inclined to think that  $LM^*$  is not a noetic event--that there isn't any  $x$  (in particular, neither Moe nor Larry) nor any  $y$  (in particular, not  $T_C$ ) such that  $LM^*$  is an event characterized by  $x$ 's  $^{gen}$ thinking  $y$ . Here is why:  $L^*$  itself is surely not characterized by any property that, for some thought,  $y$ , is the property of being such that Moe is  $^{gen}$ thinking  $y$ . Provided that Moe is not Larry (they were the three stooges after all),  $L^*$  is not an event of Moe's thinking  $y$ , for any  $y$ . Then it is a consequence of (A11) that the conjunctive event,  $LM^*$ , is not characterized by any such property. And parallel reasoning suggests that there is also no  $y$  such that the property of being such that Larry is  $^{gen}$ thinking  $y$  characterizes  $LM^*$ . And I take it that if this event conjoining solely  $L^*$  and  $M^*$  isn't characterized by properties of either of these two sorts, then there is no  $x$  and  $y$  at all such that  $\exists z[x \text{ is } ^{gen}\text{thinking } y]$  characterizes  $LM^*$ . If no thinking on Moe's part alone characterizes that conjunctive event, and no thinking on Larry's part alone does so either, then there is no person such that thinking

on his or her part characterizes LM\*. If this is right, then by (D13), LM\* is not a noetic event.

From here on, I shall suppose it safe to speak of the subject of any noetic event--(A12) guarantees it at least one subject; (A13) guarantees it a unique one.<sup>9</sup>

(D13) also guarantees that every noetic event, e, may be associated with at least one thought, y, such that for some x the property of x's <sup>gen</sup>thinking y characterizes e. What can we say of this association? For one thing, it is doubtful that for every noetic event, there is a unique thought with which it is associated in this way. This is doubtful in view of considerations of the sort raised in Chapter 4 that lead to the Plurality of Thoughts Argument (PTA) and its analogues. Suppose that I am thinking that politicians lie and cheat. Argument 1 purports to show that supposing just this, it follows that there are at least two things that I am thinking. Indeed the line of argument suggests three thoughts in particular that I may be said to be having: i) the thought that politicians lie and cheat, ii) the thought that they lie, and iii) the thought that they cheat. But must we hold that in such circumstances there are three corresponding events of thinking? I don't have an argument against this contention, but in the absence of any argument in its favor, it seems plausible to allow, rather, that it is at least possible that I may be thinking that politicians lie and cheat and only be engaged in one event of thinking.



But (DIST) (the distribution rule employed in Argument 1; see Chapter 4, p.36) will still yield the result that I may be said not only to be thinking that politicians lie and cheat but also to be thinking that politicians lie, and to be thinking that politicians cheat. If all three of these ascriptions are indeed true relative to the imagined circumstance in which I am engaging in only one noetic event, then I take it that this one event of thinking may be characterized as an event of my thinking that politicians lie and cheat, as an event of my thinking that politicians lie, and as an event of my thinking that politicians cheat. Then there would be three thoughts associated with a single noetic event in the manner in question. Since I am somewhat inclined to think that such cases are possible, I do not propose to accept:

(8)  $\text{nec}_{\text{gen}} \forall e ( e \text{ is a noetic event} \rightarrow \forall y \forall y' ( \exists x ( \exists z [x \text{ is thinking } y'] \text{ characterizes } e) \rightarrow y' = y ) )$

There are certain essential characteristics of noetic events that are worth noting here. In general, no matter what sort of event is at issue, I assume the subjects of events to be essential to them. Consequently, in the case of noetic events, I suppose that if a person is the subject of such an event, the event is essentially such that that person is its subject:

(A14)  $\text{nec} \forall e ( e \text{ is a noetic event} \rightarrow \exists x ( x \text{ is the subject of } e \ \& \ \text{nec} ( e \text{ exists} \rightarrow x \text{ is the subject of } e ) ) )$

I assume, further, that noetic events are essentially events of thinking, each an event of a person doing some thinking. We may indicate that an intransitive reading is called for by affixing an 'i' subscript to a verb. Then what I propose to accept is:

(A15)  $\text{nec } \forall e( e \text{ is a noetic event} \rightarrow \text{nec}( e \text{ exists} \rightarrow \exists z[\text{the subject of } e \text{ is thinking}_i] \text{ characterizes } e ))$

However, it is another matter whether a noetic event is essentially an event of someone thinking something! More specifically, it is not clear to me that every noetic event,  $e$ , is essentially such that for some  $x$  and  $y$ ,  $e$  is an event of  $x$ 's  $\text{gen}$  thinking  $y$ :

(9)  $\text{nec } \forall e( e \text{ is a noetic event} \rightarrow \text{nec}( e \text{ exists} \rightarrow \exists x \exists y( \exists z[x \text{ is } \text{gen} \text{ thinking } y] \text{ characterizes } e )))$

The sorts of considerations that lead me to question (9) have to do with cases of another sort alluded to in Chapter 4. At one point in section 4.2, I was concerned to give some idea of the grounds I had for doubting whether the following rule is valid:

$$\frac{x \text{ is thinking}_i}{\therefore \exists y( x \text{ is thinking}_t y )}$$

(where the 't' subscript indicates a transitive reading). I described a case (pp.9-10, 4.2) that had to do with an

antique furniture connoisseur, Max, who was having a very vivid hallucination of an 1870's vintage Chippendale chair. Now imagine a somewhat different situation: suppose that the circumstances in which Max finds himself really are as he mistakenly took them to be in the original case of hallucination. In other words, imagine that Max really is looking at an 18th century Chippendale and is thinking, concerning that chair, that it is a mint-condition Chippendale. The "text" of his thinking, so to speak, may be precisely the same as that in the original case of hallucination. With respect to at least some cases fitting the present description, however, it is clearly correct to say that Max is thinking something. Indeed he is thinking a thing expressed by the sentence

That is a mint-condition, late 70's Chippendale (with respect to suitable contexts). Let us call this thought that Max is having, " $T_m$ ". I think it is intuitively plausible to suppose that there is a particular mental event in which Max is engaging in this situation, an event that we are referring to if, speaking of this situation, we were to speak of "the event of Max's thinking  $T_m$ ". And concerning this event, it is simply not clear to me whether or not we should say that it--that very event--can possibly occur in circumstances of the sort originally described, where Max is only having an hallucination of a chair, where there isn't anything that Max is thinking at all. Couldn't this very

event be the one we would be reporting in such circumstances were we to say:

Max is thinking: *that is a mint-condition late  
70's Chippendale*

If this is a possibility, then it would be a case in which an event of a person's thinking something--Max's thinking  $T_m$ --is possibly such that it occurs without there being anything that the subject is thinking.

One might be tempted here to respond that if the event we're speaking of in the non-hallucinatory case is really one properly described as an event of Max's thinking  $T_m$ , then surely for that very event to occur is for Max to be thinking  $T_m$ . Surely, one might say, the event, Max's thinking  $T_m$ , is necessarily such that if it occurs, Max is thinking  $T_m$ . However, I can see no non-question-begging grounds for supporting this contention. The event, by hypothesis, is one in fact characterized by the property of being such that Max is thinking  $T_m$ . Can we infer from this much that the event is necessarily such that if it occurs, Max is thinking  $T_m$ ? I do not know.<sup>10</sup>

Considerations along these lines are what lead me to suspend judgement on two claims formulated in the preceding subsection. There is the matter of whether, if a property characterizes an event, that event is essentially characterized by the property--of whether we should accept the thesis formulated in (7). Also there is the matter of

whether a property, P, that characterizes an event is necessarily such that if the event occurs, the subject of the event has P (in cases where the event has unique subjects)--of whether we should accept the thesis formulated in (4). Since (4) can be derived from (7) (in the presence of some assumptions that I have made or am willing to make), to show that this case concerning Max's thinking  $T_m$  undermines both claims, it will suffice to see that it calls into question the claim expressed by (4). So note that the following is a consequence of (4):

(4')  $\text{nec } \forall e ( \exists z [\text{gen thinking}(\text{Max}, T_m)] \text{ characterizes } e \rightarrow \text{nec}( e \text{ occurs } \rightarrow \text{Max has } \exists z [\text{gen thinking}(\text{Max}, T_m)]))$

But if the case described above is indeed possible, then it is possible that there be an event of Max's  $\text{gen thinking } T_m$  (i.e., characterized by the property of being such that Max is  $\text{gen thinking } T_m$ ) that is possibly such that it occurs, though its subject, Max, is not thinking  $T_m$  or any other thought. If such a case is indeed a possibility, then (4'), and consequently (4) and (7), do not express truths.

I have noted that, in light of (D13), every noetic event may be associated with at least one thought: any thought, y, such that the event is one of x's thinking y, for some person x. My hunch is that if one is not committed to the view that each thought associated this way with a noetic event, e, is one of the objects of e--if one does not presume that the thought is as much a constituent of the



(10)  $\neg \forall e ( e \text{ is a noetic event} \rightarrow \exists x \exists y ( x \text{ is engaging in } e \rightarrow x \text{ is } \text{gen}^n \text{ thinking } y ) )$ .

(10) follows from (A10), (A12) and (A13).

#### 9.2.4 Types and Instances

There is a distinction commonly drawn in philosophy between concrete, particular events, and items that are sometimes spoken of as "event types". Perhaps the same distinction is intended when philosophers have spoken of distinguishing concrete events from generic events. I'm not sure. At any rate, for the moment I shall assume that the reader is familiar enough with the concept of a type. On my usage, 'type', 'sort' and 'kind' are all more-or-less interchangeable expressions that apply to the same bunch of things. I am not sure of the precise features of our ordinary concept of a type. In the present study I propose to adopt a somewhat regimented notion, and I shall be restricting my attention to types of event, and a rather select group of such types, at that. A little later on, I shall have more to say about what sort of thing I understand 'types' (and specifically, 'event types'), to refer to, in this regimented sense.

Types of event may be said to have particular events as their instances just as types of tiger may be said to have particular tigers as their instances. I take this relation of instantiation as a primitive. On the usage I propose, only types are possibly instantiated. So I am assuming:

(A17)  $\text{nec } \forall x( \text{pos } \exists y( y \text{ instantiates } x ) \rightarrow x \text{ is a type} )$

I do not suppose that all types of events have instances. Also, I do not suppose that among event types that do have instances, their instances all occur; I am prepared to allow that there are some types none of whose instances in fact have occurred or ever will occur. Furthermore, I do not assume that events instantiate their types essentially--if an event happens in fact to be an instance of a given type, I do not take it to follow from this that wherever it exists (nor even wherever it occurs) it instantiates that type. Thus I do not accept any of the following (here and in what follows, I use T-variables to range exclusively over event types):

(11)  $\text{nec } \forall T( \text{pos } \exists e( e \text{ instantiates } T ) )$

(12)  $\text{nec } \forall e \forall T( e \text{ instantiates } T \rightarrow e \text{ has occurred or will occur } )$

(13)  $\text{nec } \forall e \forall T( e \text{ instantiates } T \rightarrow \text{nec}( e \text{ exists } \rightarrow e \text{ instantiates } T ) )$ ,

#### 9.2.5 Noetic Event Types

I assume that among all the various types of event, some are types of noetic event. I'm afraid that again I cannot offer any useful set of necessary and sufficient conditions for what I shall mean when I speak here of "noetic event types". I assume that noetic event types can only be instantiated by noetic events:



(A18)       $\text{nec } \forall T( T \text{ is a noetic event type} \rightarrow \text{nec } \forall e( e \text{ instantiates } T \rightarrow e \text{ is a noetic event} ))$

I also suppose that among the things that I would count as event types at all, any that are instantiable and can only be instantiated by noetic events are noetic event types:

(A19)       $\text{nec } \forall T( ( \text{pos } \exists y( y \text{ instantiates } T ) \& \text{nec } \forall y'( y' \text{ instantiates } T \rightarrow y' \text{ is a noetic event} ) ) \rightarrow T \text{ is a noetic event type} )$

But informative, necessary and jointly sufficient conditions elude me. The problem is that on the conception of types to be proposed below, there are many event types that are not possibly instantiated that I would not wish to count as types of noetic event. So the condition expressed in the consequent of (A18) is not sufficient. On the other hand I do not wish to rule out that there are noetic event types that are themselves uninstantiable. Consequently, the condition expressed in the antecedent of (A19) is not necessary. I can offer some examples of instantiable noetic event types, and I shall have to hope that this serves to convey the idea.

I assume that among noetic events, some are events of persons occurrently believing that politicians lie and cheat, some are events of persons imperatively wishing that Sarah would say "yes" (for some given Sarah), and others are events of persons wondering whether Jones will arrive on time (for some given Jones). And I assume that in each of

these cases, the noetic events of which we speak instantiate a noetic event type: there is, for example, a type necessarily such that it is instantiated by all and only occurrent believings that politicians lie and cheat, a type of imperative wishings, necessarily such that it is instantiated by all and only imperative wishings that Sarah would say "yes", and so on. In each of these cases, an instantiable noetic event type is in question: a type of event that is possibly instantiated and is necessarily such that, for some thought, x, any events instantiating that type are events of persons <sup>gen</sup>thinking x.

Let us say that an event type is a "\*correlate" of a thought, according to the following:

(D14)  $T$  is a \*correlate of  $x$  =df  $T$  is a noetic event type & nec  $\forall e$  (  $e$  instantiates  $T$  iff  $\exists y$  (  $\exists z$  [ $y$  is <sup>gen</sup>thinking  $x$ ] characterizes  $e$  ) )

Roughly, a \*correlate of a thought,  $x$ , is a noetic event type necessarily such that all and only events instantiating it are events of persons <sup>gen</sup>thinking  $x$ .

I assume that there are noetic event types and thoughts related in this way. Take for example, a type suggested above--one necessarily such that it is instantiated by exactly those events of persons occurrently believing that politicians lie and cheat. I take it that any such noetic event type is a \*correlate of the thought, call it " $T_{p|c}$ ", that politicians lie and cheat. Relative to any possible

situation, any instance of such a type will be an event satisfying the following (for 'e'):

$$\exists y(\exists z[y \text{ is } \text{gen}^{\text{thinking}} T_{p|c}] \text{ characterizes } e)$$

I do not assume that for every noetic event type there is a thought of which it is a \*correlate. On the conception of types to be proposed below, I will not wish to rule out that there are disjunctive event types, instantiated as well by events of  $\text{gen}^{\text{thinking}} x$  and by events of  $\text{gen}^{\text{thinking}} y$ , for distinct thoughts,  $x$  and  $y$ . If we must admit such types, then I would be inclined to hold that some of them are noetic event types. But we couldn't say, of any such noetic event type,  $T$ , that there is any thought such that an event instantiates  $T$  iff the event is one of a person's thinking that thought. Then such a type is not a \*correlate of any thought. So I shall not assume

(14)  $\text{nec } \forall T( T \text{ is a noetic event type} \rightarrow \exists x( T \text{ is a } \text{*correlate of } x ))$

However, I do propose to assume that for every thought, there is a \*correlate:

(A20)  $\text{nec } \forall x( x \text{ is a thought} \rightarrow \exists T( T \text{ is a } \text{*correlate of } x ))$

This is a very substantial assumption, and the conception of thoughts that I shall be laying out in the next sections hinges on it.

is expressed by the conclusion will vary, and do so with attendant variation in truth-value relative to selected situations. I believe that similar cases (mutatis mutandis) hinging in this way on context-sensitivity of the conclusions yield counterexamples to certain instances of both i) and ii) as well. But if the inference of (1) from (1') fails, it will not be due to such examples since, I take it, (1) is context-insensitive, and the same goes for the inference of (2) from (2').

However, perhaps it is worth noting that there are some instances of iii), with context-insensitive conclusions, that are invalid as well. Consider:

iii<sub>F</sub>) Benjamin Franklin said: "President Bush will never order an invasion of Iraq"  
-----  
:: Benjamin Franklin said that President Bush will never order an invasion of Iraq.

I assume that the conclusion here is not context-sensitive. Now suppose that back in the early 1800's, Benjamin Franklin had uttered these words: "President Bush will never order an invasion of Iraq". Then I take it that the premise of iii<sub>F</sub>) expresses a truth, just by virtue of Franklin's utterance. But I am inclined to say that the conclusion of iii<sub>F</sub>) does not, by that fact alone, express a truth. There wasn't and had never been, as of Franklin's time, any such person as President Bush, nor any such country as Iraq. It perhaps doesn't follow, given this, that it is incorrect to assert of Franklin that he said Bush will never order an invasion of Iraq. Perhaps, under the following circumstances, even though there had never been a president Bush, nor any such country as Iraq, the conclusion of iii<sub>F</sub>) would express a truth: imagine that Franklin said, "Listen, I'm telling you that there will be a 41st president of our country, and in 1990 there will be a foreign country that occupies the region ... [lengthy specification of longitudes and latitudes follows that picks out the region in fact to be occupied by Iraq (pre-annexation of Kuwait)]..., and I'm telling you that he, that president-to-be, will never order an invasion of it, that country-to-be. Maybe relative to such circumstances, the conclusion of iii<sub>F</sub>) expresses a truth.

However, it seems clear to me that it does not follow, merely upon the truth of what is expressed by the premise of iii<sub>F</sub>), that what is expressed by the conclusion of iii<sub>F</sub>) is true. Then if I'm right about iii<sub>F</sub>), and moreover, corresponding instances of i) and iii) stand or fall together, then I think we should have to grant that the inference of (1) from (1'), in particular, is not valid.

It is not clear to me that instances of i) and iii) do stand or fall together, but the validity of the inferences, (1')/::(1), (2')/::(2), remains unclear to me as well.

3. I think it is plausible to claim that Witold can't be wishing that Jones will arrive on time unless he believes some things; in particular, wishing that Jones will arrive may entail believing that someone exists. If one accepts this claim, one might be tempted to infer that situations meeting Constraint 1 are not possible. For I say that Witold is only wishing, yet from the description of the case it follows that he is also believing something. But this reasoning is based on a confusion. Constraint 2 does not require that Witold lacks any beliefs at the moment; it requires only that he isn't bearing any occurrent attitudes apart from those required by that of imperative wishing. Imperative wishing does not require occurrent belief. Then if Witold is only wishing, he can't be having any occurrent beliefs. But that is not incompatible with the description of the case.

Belief and occurrent belief seem plainly to be different in this respect: it is plausible to claim that bearing the attitude of wishing or wondering (or as well any of a host of other attitudes) to a thing entails having a belief (though perhaps only a quite minimal belief, such as that something exists); bearing that same attitude to that same thing, however, does not entail occurrently believing anything.

4. It is not clear to me that there are such other occurrent beliefs that we should acknowledge that O'Brien is having in \*-situations. (Similar points apply, I believe, to the question of whether Witold is having other wishes besides the two expressed by (4) and (4'); see note on following page in the text.) The matter depends on what other analogues of (DIST<sub>1</sub>) must be accepted. One might find the following plausible, for example:

(DIST?) t is occurrently believing that Jones will arrive  
on time  
-----  
:: t is occurrently believing that someone will  
arrive on time

If (DIST?) is correct, we should allow that the following ascription also expresses a report true relative to \*-situations, in addition to (3) and (3'):

(a) O'Brien is occurrently believing that someone will  
arrive on time

However, conclusions of inferences sanctioned by (DIST?) are ambiguous and may be interpreted either de re or de dicto. Assessment of the validity of a given instance of (DIST?), then, must await disambiguation.

On one hand, if the conclusions are to be understood as de dicto ascriptions, with the quantifier 'someone' not taking wide scope over 'O'Brien is occurrently believing', then it is not clear to me that inferences sanctioned by (DIST?) are in general valid. The case is different with inferences involving non-occurrent belief. I grant that if a person believes that Jones will arrive on time, then this person may be ascribed de dicto the belief that someone will arrive on time. But with occurrent belief, I do not see that matters go the same way. I grant as well that if a person is occurrently believing that Jones will arrive, then that person may be said to believe, non-occurrently, de dicto, that someone will arrive. But that is not an entailment relevant to the inferences with which we are concerned.

On the other hand, if the ascriptions that figure as conclusions to instances of (DIST?) are to be interpreted de re, then I am inclined to think that such inferences are questionable for other reasons. Consider the parallel:

(DIST?) t is occurrently believing that Santa Claus will arrive  
 -----  
 ::  $\exists x$ ( t is occurrently believing that x will arrive)

Surely, instances of (DIST?) are not in general valid. Then we should say the same for (DIST?), if the conclusions of its instances are to be interpreted de re.

5. In Note 2. it was observed that some instances of the pair

(f1') t is thinking:  $\emptyset$

(f2') t is thinking:  $\emptyset^*$

do not imply the corresponding instances of

(f1) t is occurrently believing that  $\emptyset$

(f2) t is wishing that it would be that you  $\emptyset^*$

And although in some cases this is due to the relevant instances of (f1) and (f2) being context-sensitive, this is not always so. One case was considered above deriving from the choice of the standard indicative, 'President Bush will never order an invasion of Iraq', for  $\emptyset$ . So there are cases where the truth of the displayed-sentence ascription does not guarantee the truth of the corresponding standard ascription. Any such case will be one where it does not suffice, for the constraint presently at issue, to require that the \*-situation analogues be ones relative to which the displayed-sentence ascription alone is true.

So I am putting a lot of weight on the present clause, and the requirement expressed loosely in it, that the claims expressed by corresponding standard and displayed-sentence ascriptions are to be true relative to these situations in virtue of the same bit of occurrent believing or wishing, as the case may be. In formulating Constraint 1, I avoided this (or meant to avoid it) by adding the adverbial clause, 'concerning Jones', to (1') and (2'). The resulting displayed-sentence ascriptions (clauses a. and b.) seem to me to do the trick. In general, however, I do not see any clear, principled way to produce, for any given indicative,  $\emptyset$ , a pair of displayed-sentence ascriptions that will suffice in this connection: ones that express claims such that it is enough to require that those claims be true relative to a situation, in order to impose a constraint, in the case of  $\emptyset$ , with an effect analogous to that of Constraint 1, in the case of 'Jones will arrive on time'.

Suppose, for example, that the indicative,  $\emptyset$ , selected for instantiating (RV2), contains occurrences of two proper names. Suppose  $\emptyset$  is 'Henry won't bother Laurie'. In such a case, I do not see how the addition of adverbial clauses to instances of (f1') or (f2') will do the trick. It will not do to say that the \*-situation analogues in this case are situations relative to which the claim expressed by the following is true:

- (a) Witold is thinking, concerning Laurie and Henry:  
*Let it be that Henry won't bother Laurie.*

Briefly, the problem that I see with this particular proposal is that it might be that Witold uses the name 'Laurie' for Henry, and 'Henry' for Laurie. Some such situations will be ones relative to which the claim expressed by (a) is true, though they are not ones in which Witold is wishing that Henry wouldn't bother Laurie, but rather, ones in which he's wishing that Laurie doesn't bother Henry. Plainly, similar problems would confront other appeals to instances of (f1') or (f2') with these "concerning x" modifiers.

It may be that a proposal can be fashioned that gets around this sort of difficulty by employing the concept of event-characterization introduced in the next chapter (section 9.2). For any standard indicative,  $\emptyset$ , an event of occurrent believing may be said to have the conjunctive property (" $P_{\emptyset}^{\emptyset}$ ") of being an event of O'Brien's occurrently believing that  $\emptyset$ , and as well an event of O'Brien's thinking:  $\emptyset$ . Likewise, an event of wishing may be said to have the conjunctive property (" $P_{\emptyset}^{\emptyset}$ ") of being an event of Witold's imperatively wishing that it would be that  $\emptyset$ , and as well an event of Witold's thinking: *Let it be that  $\emptyset$* . I believe that for each of these properties it is possible that an occurring event has it; moreover, I think that it is possible for two events, each one having one of these

properties (and not the other) to co-occur. I claim, in particular, that there are two such co-occurring events in any \*-situation; I believe this is guaranteed by the condition imposed by Constraint 1.

The idea, then, would be to require that, for the selected  $\emptyset$ , the relevant \*-analogues are situations in which

- (b) there are two occurring events, e and e', such that e has  $P_{\emptyset}$  and e' has  $P_w$ .

(the analogue of Constraint 2 will guarantee that only one of the events has each property). I believe that a precise and adequate analogue of Constraint 1 can be stated in generality along these lines. I am not sure.

6. There is a difficulty confronting my appeal to instances of

- (f1) t is thinking: *Let it be that  $\emptyset$ ,*

in stating analogues of Constraint 1. The difficulty is of the sort of problems raised in the preceding note, and has rather to do with the choice of displayed imperative.

To illustrate the problem, take  $\emptyset$  to be

- (a) No bird is noisy

In this case, I do not believe that the problems discussed in the preceding note arise in stating an analogue of Constraint 1. I am inclined to think that it suffices to say, in O'Brien's case, that the relevant \*-situation analogues are ones relative to which the following expresses a truth:

- (b) O'Brien is thinking: *no bird is noisy*

For I take it that (b) implies

- (c) O'Brien is occurrently believing that no bird is noisy.

and also that (b) is compatible with what would be the counterpart of Constraint 3 in this case: that O'Brien does not have an occurrent belief stronger than any required by (c). (For this notion of an occurrent belief (or wish) being stronger than another, see discussion of Constraint 3 in the text.) And I suppose that, in general, if i) an instance of

- (f2') t is thinking:  $\emptyset$

or



(f3') t is thinking:  $\emptyset^*$

(substituends of ' $\emptyset^*$ ' being imperatives) implies the corresponding instance of

(f2) t occurrently believes that  $\emptyset$

or

(f3) t is wishing that it would be that  $\emptyset$ ,

and in addition, ii) the instance of (f2') or (f3') is compatible with the counterpart of Constraint 3--if it does not require an occurrent belief or wish stronger than any required by the corresponding instance of (f2) or (f3), as the case may be--then to express a constraint (for the relevant substituend of ' $\emptyset$ ') whose effect is parallel to that of the a. or b. clause of Constraint 1 (for the indicative, 'Jones will arrive on time'), it will suffice to require that the instance of (f1') or (f2') at hand expresses a truth relative to the \*-situation analogues at issue.

But it is perhaps not clear, for any indicative,  $\emptyset$ , whether the constraint in Witold's case can be expressed by an instance of (f1). In particular, it may be questioned whether

(d) Witold is thinking: *Let it be that no bird is  
noisy.*

implies

(e) Witold is wishing that it would be that no bird is noisy.

I am inclined to think that there is at least one available interpretation of (d) on which it does imply (e), but this inclination, and the inclination to hold, more generally, that instances of (f3) are implied by corresponding instances of (f1), may be questioned.

It may be claimed that, strictly speaking (modulo the difficulty of the preceding note), instances of (f1) imply, not the corresponding instances of (f3), but rather the corresponding instances of

(f4) t is wishing that you will let it be that  $\emptyset$

The contention would be that, taken strictly and literally, imperatives of the form

Let it be that  $\emptyset$

should be understood to involve the reading of 'let' that is

involved in literal interpretations of indicatives of the form

t will let it be that  $\emptyset$ .

The problem then is that, strictly speaking, the claim expressed by (d) with respect to a context, c, would imply the claim expressed, with respect to c, by

(f) Witold is wishing that it would be that you let it be the case that no bird is noisy.

but not that expressed by (e). If this contention is right, then the conclusions of the relevant instances of LA $\emptyset$  and AST $\emptyset$  will not conflict with (RV2<sub>a</sub>). For there would be some situations satisfying the analogues of Constraints 1 - 3 relative to which the claim expressed by (e) is false. Consequently, (RV2<sub>a</sub>) will not yield, concerning all such situations, that there is a proposition (that no bird is noisy) such that O'Brien is occurrently believing it, and Witold is wishing it.

It seems to me, too, that if the present objection to employing instances (f1) is correct, then we cannot employ those instances in formulating analogues of Constraint 1 along the lines suggested at the end of the preceding note. Employing the instance of (f1), got with (a) in for ' $\emptyset$ ', that proposal would require that the relevant \*-situation analogues be situations where

(g) there is an occurring event that is both an event of Witold's wishing that it would be that no bird is noisy, and as well, an event of Witold's thinking: *Let it be that no bird is noisy.*

I am inclined to think that at least on one interpretation this expresses a claim that is possibly true and compatible with the relevant analogues of Constraints 2 and 3. But if the present line of objection is right, and (d) does not imply (e), then I think we should have to say that there couldn't be any single occurring event that has this conjunctive property, at least not in situations that also meet the analogues of Constraints 2 and 3. For the analogue of Constraint 3 will require that the strongest thing Witold is imperatively wishing in such situations is (intuitively put) the wish that no bird is noisy. But if there is an occurring event of Witold's wishing that someone (referent of 'you') would let it be that no bird is noisy, then there is this other wish--(intuitively put) the wish that you would let it be that no bird is noisy--that is independent of the previous one; neither one is a stronger wish than the other.

Two responses to this line of questioning do not seem to me satisfactory. One might dismiss the problem, claiming

that it is clear enough which imperative wishes are supposed to be captured by requirements formulated using instances of (f1): the ones reported by instances of (f3). But it seems to me that this just begs the line of questioning at issue. The contention at hand is that instances of (f1) do not imply corresponding instances of (f3). If that claim is right, then whether or not one "gets the idea" of which constraints I want by employing instances of (f1), those constraints are not, strictly speaking, expressed by those appeals. I am interested in how, strictly speaking, those constraints may be expressed.

Another response might be to claim that (f) itself implies (e) (and more generally, that instances of (f4) themselves imply corresponding instances of (f3)). I don't think that from the fact that I am occurrently believing that you will let it be the case that one bird escapes, that I am occurrently believing that one bird will escape (though I think it would follow that I believe this). And I doubt too that it follows from the fact that I am wishing that you would let it be that no bird is noisy, that I am wishing that it would be that no bird is noisy (though, it perhaps does follow that I desire this). On the discrepancies noted here between belief and occurrent belief, and between desire and (occurrent) wishing, see notes 3. and 4. above. Also, this response would leave us with the obstacle discussed just above for the proposal I offered at the end of the previous note: even if (f) implies (e), it presumably requires a wish stronger than any required by (e). Then there won't be any situations (not possible ones anyway) that conform to the analogues of Constraints 2 and 3, yet at which any event is occurring that is one of Witold's wishing that it would be that no bird is noisy and also one of Witold's thinking: *Let it be that no bird is noisy.*

Perhaps it is not possible to find, for any standard indicative, some displayed-imperative ascription that serves to express the desired condition on situations (along the lines of clause b. of Constraint 1). Similar problems would arise in connection with other imperative forms that one might employ in this connection: for example, 'See to it that  $\emptyset$ ', 'Make it the case that  $\emptyset$ ', 'Bring it about that  $\emptyset$ ', etc. Perhaps the Yiddish form, [ that  $\emptyset$  ], for subjunctive  $\emptyset$  (as in 'That a radish grow on your navel, God forbid') would work. I believe that French allows such constructions in ordinary usage, and that the sentence [ Que  $\emptyset$  ] for (French) subjunctive  $\emptyset$ , serves just the called for function, of expressing an imperative wish. If such forms are to be found in French and happen not to have proper translations in English, perhaps it would not be unwarranted to appropriate instances of (f1) (or one of the other forms just cited) for the purpose.

At any rate, there are very many cases where displayed-sentence ascriptions (instances of (f2') and (f3')) are available which imply the corresponding instances of (f2)

and (f3) (surely, clauses a. and b. of Constraint 1 constitute one case among very many relevantly similar cases). In all of these many cases, analogues of Constraints 1 - 3 can be formulated, and \*-situation analogues can be specified consideration of which motivates analogues of LA and AST that are just as compelling as the originals. Reflection on this fact by itself, it seems to me, should provide some grounds for allowing that if LA and AST are to be accepted, then we may doubt whether there is any standard indicative,  $\emptyset$ , such that the instantiation of (RV2) for  $\emptyset$  expresses a truth.

7. This formulation is not quite adequate in the case of ambiguous sentences. I don't think that the added complexity required to accommodate such cases (by making the parameter of interpretation explicit) is necessary for our purposes. So the present statement should be understood to be restricted to the case of unambiguous indicatives. The same point holds for (20) and for my formulation of Thesis 3, both further on in the text.

## CHAPTER 9

### AN ALTERNATIVE: THOUGHTS AS TYPES OF EVENT

#### 9.1 A Fable About R\*SS\*LL's Step

Once it is definitely recognized that the proposition is...not a belief..., but an *object* of belief, it seems plain that a truth differs in no respect from the reality to which it was supposed merely to correspond.

G.E. Moore<sup>1</sup>

In Chapter 1, I alluded to an old argument dating back to Frege, Moore and Russell, designed to show that we cannot take 'thought'--used as a common noun in the sense that has been of concern to us throughout this study--to stand for concrete events of thinking, to stand, that is, for events of particular persons' doing some thinking.

It needn't be denied that there is a usage of 'thought' on which the term does stand for particular events of thinking. But on that usage, it couldn't be said that your thought and my thought were the same. For what 'your thought' denotes, on that usage, is an event involving you and not me as subject, whereas the thing denoted by 'my thought', on that usage, is an event involving me and not you. Since you and I are distinct, so are our thoughts, on that usage of 'thought'.

Let us reserve the phrase, 'shareable sense', for the sense of 'thought' that has been our principal concern in this study, the sense in which the term stands for items

that you and I may be said to have or be thinking in common, in virtue of having or thinking the same thought. (Strictly speaking it hasn't been ruled out that there are many such "shareable" senses of the term 'thought', but for ease of exposition, let me set this point aside and suppose that there is only one such sense; the policy will not jeopardize any of the main points I wish to make.) Concrete events of thinking themselves do not seem to be items of the sort to which the common noun, 'thought', applies in this shareable sense. That is the thrust of the old argument. Then what sort of items are the things that we refer to when we speak of 'thoughts' in the shareable sense? The Propositional Tradition proposes a particular answer to this question, and I wish to turn now to consider how certain followers of that tradition may have arrived at their answer.

I have used the term, 'circumstance', at various points in the study so far, on what I think is a fairly familiar and tolerably clear usage: for example, I have spoken of circumstances in which someone did something or other, or in which such and such an event took place, or circumstances relative to which this or that claim is true, etc. I've also used 'situation' to stand for things of the same sort; some might use instead the phrase "state of affairs" for the kind of items I have in mind. Although this ordinary usage of "circumstance" has been clear enough for purposes so far, let me briefly say something further at this point concerning the sort of thing intended.

I take circumstances to be abstract items, ways for things to be--at least some of which may be taken to be represented by sets of possible worlds. For example, circumstances of my now having a good time may be represented by sets of worlds whose members all include me having a good time presently. Circumstances may be said to obtain or be actual--I use the predicates 'obtains' and 'is actual' interchangeably--but a circumstance's obtaining or being actual should not be confused with its existence. I assume that there are (that there exist) circumstances that do not obtain (aren't actual): circumstances that are "merely possible". If a circumstance is taken to be represented by a set of possible worlds, we may say that it obtains or is actual iff the actual world is one of its members. I have reservations about whether circumstances are properly represented along these lines, in terms of possible worlds. There are other conceptions that have been proposed that expand the notion of circumstance to include ways for things to be that are not possible (and that, accordingly, are not well represented by any sets of possible worlds).<sup>2</sup> However, I do not think that the main points I wish to make in what follows hinge on this question.

There is a sense in which a circumstance may be said to be the content of thoughts of various sorts: an occurrent belief, wish and question may be said to have one and the same circumstance as their common content. Loosely, the

content of a thought is the circumstance that the thought may be said to concern or be about. For example, if I am thinking that Jones will arrive on time, my thought (at least one thought I am having) is about the circumstance of Jones' being such that he will arrive on time; if you are wishing that Jones would arrive on time, your thought (the wish, or at least one wish, you are having) concerns that same circumstance. There are problems with this characterization of content,<sup>3</sup> but for purposes at hand, perhaps I may assume that the reader has an acceptable idea of what it is for a circumstance to be the content of a thought, whether an occurrent belief, a wish, a question, or an "object" of any other attitude. At any rate, I shall proceed with this assumption, and with the assumption, as well, that in examples to be discussed, it will be clear with respect to given thoughts, which circumstances are the contents of those thoughts in the relevant sense.

The fact is that many philosophers of the Propositional Tradition have supposed that what we mean by "thoughts", when we use the phrase in the shareable sense, just are circumstances (or some might rather use one of the terms, 'proposition' or 'state of affairs', intending by it, however, the same sort of thing as I here intend when I speak of circumstances). In fact their view would be that a given thought just is that thought's content. It may seem odd to identify a thought with anything that that thought itself could be said to concern or be about; I find it



counterintuitive. Nevertheless, it is pretty easy to see the plausibility in such a proposal. Here is a fable about how a philosopher might have arrived at this view.

### 9.1.1 The Fable

There once was a famous philosopher named "R\*SS\*LL". Having seen quite clearly that thoughts could not plausibly be identified with concrete events of thinking, R\*SS\*LL made the following observation: "Take any two acts of judging" ('judging' was his technical term for occurrent believing, and he commonly counted events of occurrent believing as acts) "and suppose that, in virtue of engaging in those particular acts, the subjects may properly be said to be thinking the same thing. Then plainly," R\*SS\*LL observed "on any such occasion, we should want to say that the thought these two have in common concerns the same fact". ('fact' was R\*SS\*LL's term for what I have been speaking of as "circumstances", for what his friend W\*ttg\*nst\*n spoke of as "states of affairs".) "Suppose, for example," R\*SS\*LL proceeded "that our two subjects are both judging that Mt. Blanc has many snowfields. This would be a case where we should say they are thinking the same thing. But then surely, we should also say that their common thought concerns the same fact, namely the fact of Mt. Blanc's having many snow fields."

"But," R\*ss\*ll continued, "let us now go in the other direction. Suppose that our two thinkers are having

thoughts that could be said to concern the same fact. Isn't it clear that in any such case it will be correct to say that they are thinking the same thing, having the same thought? Suppose for example, that both are wishing to know whether Scott authored Waverly. Here is a case where we should be inclined to hold that their thoughts concern the same fact, namely that of Scott's authoring Waverly. But then plainly this is also a case where we should say that they are thinking the same thing, having the same thought."

"It is apparent, then" R\*SS\*LL concluded, "that for any two acts of thinking, the subjects may be said to be thinking the same thing just in case what they are thinking concerns the same fact. Then we might as well equate the thought that a person has (though not to say the particular act of thinking in which the person is engaged) with the fact that the person's thought concerns or is about."

With this lead set by R\*SS\*LL, all philosophers following in his footsteps (keep in mind that this is a fable), arrived very naturally at the central tenets of the Propositional Tradition. If one assumes that the things occurrently believed are in general truth-valued, and moreover, one follows R\*SS\*LL in identifying thoughts with contents, one will be led to the conclusion that circumstances, at least those that are the contents of occurrent beliefs, are true or false thoughts--hence propositions. And since it is plausible to suppose that if

a circumstance is the content of an occurrent belief it may also be the content of what one is thinking when one is wishing or wondering, hoping or doubting, etc., it will be natural to conclude as well that circumstances--propositions--are the "objects" of all the attitudes.

Philosophers were led, this way, to the two component principles of the Received View. Since it is plausible to think that any circumstance that is the content of an occurrent belief, is as well the content of a wish, and a question, if one is identifying contents with what is occurrently believed, wished or wondered, one will be led straight-away to (RV1). More specifically, the content of what one is occurrently believing, wishing, or wondering, when one is occurrently believing that  $\emptyset$ , wishing that it would be that  $\emptyset$ , or wondering whether  $\emptyset$ , will be the very same circumstance, what R\*SS\*LL would have spoken of as "the fact that  $\emptyset$ " (let me set aside R\*SS\*LL's troubles that arose concerning cases where it is not a fact that  $\emptyset$ ). Thus, if one is inclined to identify this circumstance with the proposition that  $\emptyset$ , one arrives straight-away at (RV2).

Plainly, all this still leaves open the question of what sort of things propositions are; circumstances, of course (or states of affairs, R\*SS\*LLian facts, situations; choose your phrase), but what sort of thing are these? Proposals varied in response to this latter question, with concomitant variation in proposals as to the nature of propositions. There was the old R\*SS\*LLian view according

to which propositions--"facts"--are complex entities, each an arrangement of an object and property (or of several objects under a relation), the object and property (or objects and relation) being counted as constituents of the fact. More recently, the concept of possible worlds has been employed in explicating the nature of propositions. Thus, philosophers have suggested that we view propositions as sets of possible worlds, or as functions from worlds to truth-values. Others have proposed to take propositions as "intensional relations" of a certain sort: 0-ary ones. Still, the conception of propositions as things akin to what I mean by "circumstances" has been the leading idea. All of these accounts, in their own ways, have proved to be fruitful and promising proposals concerning propositions, and consequently--so it was supposed--of thoughts in general. Here the parable ends.

#### 9.1.2 R\*SS\*LL's Step

What I wish to highlight in this fable is a certain step that R\*SS\*LL and all his followers made--I shall refer to it as "R\*SS\*LL's step". I believe that this step, or one closely analogous to it (concerning specifically belief), is implicit in G.E. Moore's remarks that I quoted at the head of this section. It is the step of supposing, upon noting that the term 'thought', in its shareable sense, cannot plausibly be held to apply to particular concrete events of occurrent believing (or wishing, or wondering, etc.), that

the term must apply rather to contents--to items that we would, intuitively speaking, say the thoughts are about, or concern (that the term applies to things in significant respects akin to what I mean by 'circumstance': R\*SS\*LL's complexes, or sets of possible worlds, or functions from sets of worlds to truth values, etc.)

If one has one's attention focussed exclusively on the case of belief (or occurrent belief), R\*SS\*LL's step has some plausibility. For as R\*SS\*LL noted (in effect), the following expresses a truth:

- (1)  $\text{nec } \forall x \forall x' \forall y \forall y' \text{ nec} ( \text{if } x \text{ is occurrently believing } y, \text{ and } x' \text{ is occurrently believing } y', \text{ and } y \text{ and } y' \text{ have the same content, then } \exists z ( x \text{ is thinking } z \text{ and } x' \text{ is thinking } z ) )$

Restricting attention to the case of occurrent belief, it seems indeed to be the case that two persons are bearing this attitude to things that have the same content--that concern the same circumstance--iff these persons may be said to be thinking something in common, sharing a thought. There is, then, an equivalence, at least in the case of occurrent belief, between sharing a belief and having beliefs with the same content.

In fact, it is plausible to think that the same point can be made, mutatis mutandis, concerning many occurrent attitudes: whenever one person is, for example, imperatively wishing a thing,  $x$ , and another person is imperatively wishing an item,  $x'$ , if  $x$  and  $x'$  may be said to

have the same content--to concern the same circumstance-- then it is plausible to say that the two persons are thinking something in common--sharing a thought. An analogous claim can be made concerning the occurrent attitude of wondering. For any one of a host of occurrent attitudes, it will be plausible to claim that the attitude satisfies (for 'A'):

(2)  $\forall x \forall x' \forall y \forall y' \text{ nec}(\text{ if } A(x,y) \text{ and } A(x',y'), \text{ and } y \text{ and } y' \text{ have the same content, then } \exists z (\text{ x is thinking z and } x' \text{ is thinking z } ))^4$

If sharing thoughts and sharing contents are equivalent in these single attitude cases, it may seem quite natural to suppose that the thought shared just is the shared content. And in fact, philosophers working within the Propositional Tradition commonly have restricted their attention to cases in which a single attitude is in question, especially in discussions where the nature of "objects" of the attitudes was at issue. As I have noted before, it has been a commonplace in that tradition to attend solely to the case of belief, and to suppose that the results arrived at in the case of that attitude apply as well to the case of all other attitudes.

What should we make of R\*SS\*LL's step? Since it leads directly to some of the central tenets of the Propositional Tradition, and since I believe that we should take seriously the doubts that were raised concerning those tenets in the

preceding chapter, I am inclined to think that we ought to question R\*SS\*LL's step. The arguments of the preceding chapter suggest that in cases involving two persons bearing any pair of our three attitudes of occurrent believing, wishing and occurrent wondering, the apparent equivalence of shared thought and shared content breaks down. In cases where one person is bearing one of those attitudes, and only bearing it, and the other is bearing another of those attitudes, and only bearing that attitude, then whether or not any of the things these two are thinking have the same content, it will be counterintuitive to claim that they are thinking anything in common. Yet if we were to follow R\*SS\*LL's step concerning cases where there is a content had in common, we would be led to claim that the two persons are thinking something in common. It seems to me, then, that we should think twice about taking R\*SS\*LL's step.

Fortunately, R\*SS\*LL's step is not forced on us; there are other items that 'thought' may plausibly be taken to refer to, in its shareable sense.

## 9.2 The New Category

The question is: what are the things we correctly speak of having, when we correctly speak of having thoughts? What are the things persons may properly be said to be <sup>gen</sup>thinking? One could say, simply, "thoughts", and suppose, moreover, that there isn't any other natural, ontological category to which thoughts may be subsumed.

This was not R\*SS\*LL's view. When R\*SS\*LL proposed that we take thoughts to be facts, he was proposing, concerning a certain category of items that he had independent reasons to acknowledge, that thoughts should be understood to be things of that category. However, as we've just seen, any view that identifies thoughts with their contents will be subject to the same sort of doubts that were raised in the preceding Chapter against (RV2). In the remaining sections of this chapter, I wish to develop an alternative to R\*SS\*LL's proposal. But I shall follow R\*SS\*LL at least in this respect: there is a certain category of items that I think we have independent reason to acknowledge, and I shall claim that thoughts should be understood to be things of that category. These things, I believe, prove to be a better choice than contents for the sort of items we speak of when we speak of thoughts in the shareable sense. In the present section, I shall lead up to a claim concerning which category of items is in question here, by introducing a battery of concepts and assumptions that will be important in subsequent development.

### 9.2.1 Characterization

I propose to use the phrase "noetic event" for any event,  $e$ , such that for some person (or thinking thing of some other sort),  $x$ , and some thought,  $y$ ,  $e$  is an event of  $x$ 's  $gen_{thinking} y$ .<sup>5</sup> (Hereafter, I shall take "e" variables to range solely over events.) Before discussing this



concept, I would like to address a few important background matters. I have been using the gerund, 'gen<sup>en</sup>thinking', as a common noun applying to any event of a person thinking something, but it is not clear to me that all events fitting this description are noetic events. Perhaps there are, so to speak, existentially quantified events--such a thing, for example, as an event of Sarah's thinking something, though not an event that could be said, for any thought, to be an event of Sarah's thinking it. If there are such events, they fit the description of gen<sup>en</sup>thinkings, but not of noetic events.

This way of characterizing noetic events places a lot of weight on the idea that an event may be said to be an event of x's gen<sup>en</sup>thinking y, for given x and y. In preceding discussions, I have frequently appealed the notion of an event's being one of  $\emptyset$ -ing, where " $\emptyset$ -ing" is some gerund or gerundive clause ("an event of kicking a football", "an event of my dispatching my chore for the day", etc.). I believe that the notion in question here may be understood to involve a relationship between events and properties, and I would now like to attend to that relation more directly.

When we employ an ascription of one of the forms

(F1)                    e is an event of  $\emptyset$ -ing, or

(F2)                    e is an event of t's  $\emptyset$ -ing

(where substituends of ' $\emptyset$ -ing' are gerunds, and substituends of 't's' are noun phrases in their possessive forms), I take

it that we ascribe a certain sort of property to the event denoted by the substituend of 'e'. And I suppose that when we refer to an event using a gerundive clause of the form:

t's  $\emptyset$ -ing

we presuppose that the event referred to has a property of the sort in question; in using such a term, we presuppose that the event is an event of t's  $\emptyset$ -ing. One way to understand what is being presupposed here, and what is asserted of events when we employ instances of (F1) and (F2) is as follows.

I suggest that in characterizing an event as one of  $\emptyset$ -ing (or of t's  $\emptyset$ -ing), we assert a particular relation between the event in question and the property of  $\emptyset$ -ing (or of being such that t is (or are)  $\emptyset$ -ing). Actually, I take it that in certain cases the relation in question holds, rather, between an event and a relation (for example, in saying that an event is one of hitting we assert a relation between this event and the relation of hitting, in saying that an event is one of giving we assert a relation between the event and the relation of giving). In stating assumptions and principles in what follows, though, just for ease of formulation, I shall disregard these cases. Another matter of convenience: instances of (F2) may contain plural possessive noun phrases and quantifier expressions as substituends for 't's', but in discussions to follow, I

shall usually set aside consideration of such cases and attend to instances of (F2) in which the possessives of singular referring terms are substituends for 't's'. I think the discussions will be clearer for it, with no central points for our purposes jeopardized by the practice.

So, I am assuming in what follows that if there is a property expressed by the verb phrase [is  $\emptyset$ -ing], there is a property denoted by the corresponding singular terms:

[the property of  $\emptyset$ -ing]

[the property of being such that t is  $\emptyset$ -ing]

for singular term, t, and gerund  $\emptyset$ -ing. (I am adopting one further practice out of convenience here: the "ing" forms figuring in the present progressives of verbs--as in "is  $\emptyset$ -ing"--are normally referred to as present participles, whereas the "ing" forms figuring in instances of (F1) and (F2), and in instances of the two schemas for property terms just cited, are normally referred to as gerunds; but I shall ignore the distinction of participle and gerund in what follows, and speak of "gerunds" in both sorts of case.)

As I see it, there are actually any number of relations that satisfy instances of:

R holds between an event, e, and the property of  $\emptyset$ -ing (of being such that t is  $\emptyset$ -ing) just in case the event is an event of  $\emptyset$ -ing (of t's  $\emptyset$ -ing)

for the variable 'R', where substituends for ' $\emptyset$ -ing' are suitable gerunds (each one, G, such that [is G] expresses a

property). But I propose to assume that there is just one of these many relations that is expressed when we use ascriptions that are instances of (F1) and (F2) in characterizing events.

I shall refer to the relation in question here as that of "characterization", and shall appropriate the various forms of the verb, 'characterizes', taking them to express the relation. So I take the following to express truths (for suitable gerund,  $\phi$ -ing):

[ nec  $\forall e$ ( the property of  $\phi$ -ing characterizes e iff e is an event of  $\phi$ -ing ) ]

[ nec  $\forall e \forall x$ ( the property of being such that x is  $\phi$ -ing characterizes e iff e is an event of x's  $\phi$ -ing ) ]

I do not claim that adopting this view of matters is of direct help in finding informative, necessary and sufficient conditions under which the things expressed by instances of (F1) and (F2) are true. But I do think that positing this relationship of characterizing will make it easier to formulate such proposals, and will allow us to consider questions concerning such proposals--and other proposals concerning the concepts expressed by instances of (F1) and (F2)--in a more regimented and perhaps more tractable fashion.

It should be borne in mind when considering assumptions that I claim govern the relation of characterization that ultimately they should be tested against intuitions we have

concerning a relation expressed when we speak of an event being an "event of  $\phi$ -ing", or an "event of t's  $\phi$ -ing"; I don't mean to supplant this concept, only to regiment it.<sup>6</sup>

### 9.2.2 Some Features of Characterization

One feature of the relation of characterization is that events cannot bear it to just any property. I have not been able to find a precise way, though, to mark off those properties that can from those that cannot characterize events. Intuitively, there is a distinction to be made between event properties and properties of other sorts that might be thought to be of help in the present connection. Let us say that a thing engages in an event according to

(D12)        x engages (is engaging) in e =df x is a subject of e and e occurs (is occurring)

Then, roughly, an event property, P, may be said to be one such that for any x, if x has P, then in virtue of x's having P, x is engaging in an event. Doing a sprint, exhaling, occurrently believing that politicians lie and cheat are all examples of event properties; being wise, being malleable, believing (not occurrently) that politicians lie and cheat are not. And the first three properties just cited can indeed characterize events, whereas the latter three cannot. We might say, rather, that the latter three characterize states--there are states of being wise, states of being malleable, states of belief, but

no events can be characterized these ways. In general, it seems that if a property does fit the intuitive specification of event properties just given, then it can characterize events.

These observations might lead one to think that a property can characterize an event iff it is an event property. But on the conception of characterization proposed here, there are plenty of non-event properties that can characterize events. Vacuous properties such as being such that Sarah is running, being such that O'Brien is occurrently believing something, being such that Jones is dancing the Boogaloo--all such properties by which, I claim, we characterize events when we employ instances of (F2)--are not intuitively event properties. After all, the number two may be such that Sarah is running, but it wouldn't, in virtue of that, be the subject of any event. So such a distinction between event and non-event properties does not seem to be immediately helpful in drawing a line between those properties that can and those that cannot be said to characterize events.

Could we say that for any property that can characterize an event, either it is an event property or else it is a property, P, such that for some x and some event property, P', P = the property of being such that x has P'? But an event may be properly characterized, for example, as one of somebody's doing the wash in the sink. When this is the case, I would claim, we correctly assert

that the property, of being such that somebody is doing the wash in the sink, characterizes that event. But the property in question here is not a P such that, for some x and some event property, P', P = the property of being such that x has P'. I shall have to leave the matter of which properties can characterize events on a rather loose and intuitive footing, but there do seem to me to be some clear cases on both sides of the line. The examples cited in the preceding paragraph are cases in point.

I suppose that if a property characterizes an event, then the occurrence of the event is conditioned by the subject's exemplifying the property in question (I am confining attention here to events that have single subjects). If e is an event of sprinting, then presumably e occurs only if the subject of e is sprinting. It is not clear to me, however, what manner of conditioning is the strongest that may be taken to hold here. Material conditioning surely holds; that is:

(A10)  $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow ( e \text{ is occurring} \rightarrow \text{the subject of } e \text{ has } P ) )$

(Note: the conditioning at issue is expressed by the main consequent of this and of each of the following two formulations.) The conditioning doesn't hold in the other direction. Suppose that e is some event of my running five miles. Then the property, call it R, of being such that I am running five miles characterizes e. But surely it

doesn't follow from this alone that if I have R, e itself is occurring. e may be some event that occurred in Amherst in 1987, but I may have R in virtue of engaging in some event of running five miles in Seattle in the Summer of 1990. Surely we shouldn't say that e itself is then occurring.

I am inclined to think that an event's occurrence is "subjunctively" conditioned by the subject's having a property that characterizes the event:

(3)  $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow ( \text{if } e \text{ were occurring, the subject of } e \text{ would have } P ) )$

However, it is not clear to me that strict conditioning holds:

(4)  $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow \text{nec}( e \text{ is occurring } \rightarrow \text{the subject of } e \text{ has } P ) )$

We shall consider a case in the next subsection that has led me to question the thesis formulated in (4).

Upon reflection, I think it is pretty clear that the three grades of conditioning expressed in the consequents of (A10), (3) and (4) are not themselves sufficient conditions for characterization. That is, if we replace the main conditionals in these formulations by their converses, the resulting formulations do not express truths. For simplicity, let me refer to the claims expressed by these as the "converses" of (A10), (3) and (4). Consider the converse of (A10): suppose that there is an event



characterized by my running that is occurring at this moment, and suppose too that I am presently thinking something. Then the claim that this event of my running is occurring materially implies that I have the property of thinking something. But surely we should not want to say that this event of my running is an event of thinking something. Then we should not accept that the property of thinking something characterizes e. So the converse of (A10) should be rejected.

Examples concerning events that are inessential but regular accompaniments of one another defeat the converse of (3). It might so happen that any likely event of my working on the dissertation is such that were I to engage in it, I'd also be drinking coffee. But no event of working on this dissertation is any event of drinking coffee, no matter how likely it is that my working will be accompanied by coffee-drinking--the event of working is not characterized by the property of drinking coffee. So the converse of (3) fails.

Examples concerning properties that cannot characterize events clearly defeat the converse of (4). Anyone who is occurrently believing that Jones will arrive, believes that Jones will arrive. But there are no events of (non-occurrently) believing that Jones will arrive, so no event of occurrently believing that Jones will arrive is an event of believing that she will. I am not sure whether an amended version of the converse of (4), with 'P' restricted to properties that can characterize events, is to be

accepted or not. That seems to me a difficult question. Roughly, the question is: suppose an event  $e$ , and the property of  $\phi$ -ing, are such that necessarily  $e$  occurs only when its subject is  $\phi$ -ing, and suppose too that there are events that may be said to be events of  $\phi$ -ing (i.e., that the property of  $\phi$ -ing is one that can characterize an event); does it follow, concerning any such case, that the event in question is an event of  $\phi$ -ing? I don't know.

We may formulate a certain thesis of event identity by appeal to the concept of characterization. For we can ask whether it is the case, roughly put, that if  $e$  is an event of  $\phi$ -ing, and  $e'$  is an event of  $\phi'$ -ing, and  $\phi$ -ing and  $\phi'$ -ing are different properties, then  $e$  and  $e'$  are different events. We may ask, in other words, whether the following expresses a truth:

(5)  $\text{nec } \forall e \forall e' (( P \text{ characterizes } e \ \& \ P' \text{ characterizes } e' \ \& \ P \neq P' ) \rightarrow e \neq e' )$

I am very much inclined to think that the thesis formulated here is false. For it seems to me that some events of hitting someone, for example, are events of punching someone. In fact, I'd be inclined to say that any event of punching someone is an event of hitting someone. I do not have any arguments to offer for this particular contention, and it does conflict with certain extant accounts of event identity.<sup>7</sup> However, it is surely the case that the property of punching someone and the property of hitting someone are

distinct. Then if it is at least possible that there is an event of punching someone that is also an event of hitting someone, it will be the case concerning a pair  $\langle e, e' \rangle$ ,  $e = e'$ , that this pair satisfies the antecedent of (5) but fails to satisfy its consequent. Some cases that seem to me to provide further counterexamples along similar lines concern events of persons bearing intentional attitudes. We shall come to this matter below, in section 9.5.

Although I consider it plausible to hold that events of punching someone are events of hitting someone, I do not think that a proper generalization is to be derived here from the observation that punching someone entails hitting someone. I do not suppose that anytime a property,  $P$ , entails a property,  $P'$ , then any event characterized by  $P$  will be characterized by  $P'$ :

$$(6) \quad \text{nec } \forall P \forall P' ( \text{nec } \forall x ( x \text{ has } P \rightarrow x \text{ has } P' ) \rightarrow \text{nec } \forall e ( P \text{ characterizes } e \rightarrow P' \text{ characterizes } e ) )$$

As in the case of the converse of (4), counterexamples here derive from the fact that not all properties are ones that can characterize events. As in that case, if the claim is amended so as to concern solely properties that can characterize events, the resulting claim is still not one that I am confident is correct.

Another question that can be asked by appeal to this concept of characterization: is an event essentially characterized by any property that in fact characterizes it?

In other words, does the following formulate a truth?

(7)         $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow \text{nec}( e \text{ exists } \rightarrow P \text{ characterizes } e ) )$

The claim expressed here is quite close to that expressed by (4). In fact, in the presence of (A10)--which I accept--and a few other natural assumptions, (4) can be derived from (7).<sup>8</sup> As I noted, we shall shortly discuss a case consideration of which leads me to question whether the thesis formulated in (4), and consequently that expressed by (7), should be accepted.

Finally one last matter before turning to consider some assumptions specifically concerning noetic events. Perhaps there are conjunctive events, events that may be said, in some sense, to "conjoin" other events. So, for example, perhaps there is an event of Moe and Larry's hitting Curly that conjoins an event of Moe's hitting Curly and an event of Larry's hitting Curly. Should we say that the properties characterizing the "conjuncts" in such cases characterize the conjoining event as well? I doubt that reflection on our ordinary usage of instances of (F1) or (F2) can be expected to yield firm intuitions on this matter.

Nevertheless, I propose to assume that if a property characterizes a conjunct of an event,  $e$ , then that property may be said to characterize  $e$  itself iff it characterizes each of  $e$ 's conjuncts:

(A11)  $\text{nec } \forall e \forall P ( \exists e' ( e' \text{ is a conjunct of } e \ \& \ P \text{ characterizes } e' ) \rightarrow ( P \text{ characterizes } e \text{ iff } \forall e' ( e' \text{ is a conjunct of } e \rightarrow P \text{ characterizes } e' ) ) )$

As an illustration, imagine that Larry is hitting Curly and Moe is hitting Larry. I take it that in at least some such situations, there is an event, call it "L", of Larry's hitting Curly that is occurring and is not an event of Moe's hitting Larry. I also suppose that in some such situations in which L is occurring, there is also an event, call it "M", of Moe's hitting Larry that is not an event of Larry's hitting Curly. It seems to me that some such situations are possible. Now let us suppose further that in some (any?) situations in which L and M are occurring, there is an event, LM, that conjoins these and only these two events, L and M. I take (A11) to guarantee that the property of hitting someone characterizes LM. For it seems to me that we should allow that any event that is either an event of hitting Larry or an event of hitting Curly is an event of hitting someone. Then the property of hitting someone characterizes both L and M. But then by (A11), LM is so characterized as well. So we may say that LM is an event of hitting someone. This seems acceptable. But according to (A11), we cannot say that the property of being such that Moe is hitting Larry characterizes LM, for by hypothesis, one of the conjoined events, L, is not characterized by this property.

There may be some regimentation imposed by (A11) that is not supported by any features to be discerned by reflection on our ordinary usage of instances of (F1) or (F2). But I am presuming this regimentation when I say that a noetic event is an event of x's <sup>gen</sup>thinking y, for given x and y, and this presumption will have to bear some weight in what follows; so we shall proceed with (A11).

### 9.2.3 Noetic Events

I shall use lambda expressions of the form

$$\lambda v_1 \dots v_n [\emptyset]$$

(where variables go in for 'v1', ..., 'vn', and sentences for ' $\emptyset$ ') as terms denoting properties and relations. If the variable, v, isn't free in  $\emptyset$ , read [  $\lambda v[\emptyset]$  ] as "the property of being such that  $\emptyset$ ". Then 'noetic event' may be defined as follows:

(D13) e is a noetic event =df  $\exists x \exists y (\lambda z [x \text{ is } \text{gen} \text{ thinking } y] \text{ characterizes } e)$

I assume that there are noetic events--that there are events each of which may be characterized as an event of x's thinking y, for particular thinking thing, x, and thought, y. It seems to me that in any familiar circumstance in which it would be correct to say that someone is thinking something we are supplied with an example of such an event.

I wish to discuss some assumptions that I take to govern the concept obtained from (D13). All of these

assumptions may be seen, in effect, as placing constraints on the relation of characterization when its domain is restricted to properties of particular persons <sup>gen</sup>thinking things.

In light of (D13), every noetic event,  $e$ , may be associated with an  $x$  and a  $y$  such that  $\lambda z[x \text{ is } ^{\text{gen}}\text{thinking } y]$  characterizes  $e$ . Let us consider some features of this association. I assume that for any noetic event, a thing,  $x$ , is such that the event is characterized by  $x$ 's thinking something iff  $x$  is a subject of that event:

(A12)       $\text{nec } \forall e( e \text{ is a noetic event } \rightarrow$   
                $\forall x( \exists y( \lambda z[x \text{ is } ^{\text{gen}}\text{thinking } y] \text{ characterizes } e )$   
                $\text{iff } x \text{ is a subject of } e ))$

I also assume that every noetic event has at most one subject:

(A13)       $\text{nec } \forall e( e \text{ is a noetic event } \rightarrow \forall x \forall y( ( x \text{ is a}$   
                $\text{subject of } e \ \& \ y \text{ is a subject of } e ) \rightarrow x = y ))$

Against this it might be suggested that there are conjunctive events satisfying the definiens of (D13), and that some of these should be said to have more than one subject. So, for example, for two noetic events, one an event, say, of Moe's thinking that Curly is an ignoramus, the other of Larry's thinking that Curly is an ignoramus, perhaps there is a single event that conjoins these two. Let " $T_C$ " denote the thought that Curly is an ignoramus, " $L^*$ " denote the event of Larry's thinking  $T_C$ , and " $M^*$ " denote the

event of Moe's thinking  $T_C$ . And let us suppose that there is an event that conjoins  $L^*$  and  $M^*$ , call it " $LM^*$ ". Perhaps it should be claimed of  $LM^*$  that it has both Moe and Larry as its subjects. Then don't we have in this case a noetic event with more than one subject?

I am inclined to think not, for I am inclined to think that  $LM^*$  is not a noetic event--that there isn't any  $x$  (in particular, neither Moe nor Larry) nor any  $y$  (in particular, not  $T_C$ ) such that  $LM^*$  is an event characterized by  $x$ 's  $^{gen}$ thinking  $y$ . Here is why:  $L^*$  itself is surely not characterized by any property that, for some thought,  $y$ , is the property of being such that Moe is  $^{gen}$ thinking  $y$ . Provided that Moe is not Larry (they were the three stooges after all),  $L^*$  is not an event of Moe's thinking  $y$ , for any  $y$ . Then it is a consequence of (A11) that the conjunctive event,  $LM^*$ , is not characterized by any such property. And parallel reasoning suggests that there is also no  $y$  such that the property of being such that Larry is  $^{gen}$ thinking  $y$  characterizes  $LM^*$ . And I take it that if this event conjoining solely  $L^*$  and  $M^*$  isn't characterized by properties of either of these two sorts, then there is no  $x$  and  $y$  at all such that  $\exists z[x \text{ is } ^{gen}\text{thinking } y]$  characterizes  $LM^*$ . If no thinking on Moe's part alone characterizes that conjunctive event, and no thinking on Larry's part alone does so either, then there is no person such that thinking



on his or her part characterizes LM\*. If this is right, then by (D13), LM\* is not a noetic event.

From here on, I shall suppose it safe to speak of the subject of any noetic event--(A12) guarantees it at least one subject; (A13) guarantees it a unique one.<sup>9</sup>

(D13) also guarantees that every noetic event, e, may be associated with at least one thought, y, such that for some x the property of x's <sup>gen</sup>thinking y characterizes e. What can we say of this association? For one thing, it is doubtful that for every noetic event, there is a unique thought with which it is associated in this way. This is doubtful in view of considerations of the sort raised in Chapter 4 that lead to the Plurality of Thoughts Argument (PTA) and its analogues. Suppose that I am thinking that politicians lie and cheat. Argument 1 purports to show that supposing just this, it follows that there are at least two things that I am thinking. Indeed the line of argument suggests three thoughts in particular that I may be said to be having: i) the thought that politicians lie and cheat, ii) the thought that they lie, and iii) the thought that they cheat. But must we hold that in such circumstances there are three corresponding events of thinking? I don't have an argument against this contention, but in the absence of any argument in its favor, it seems plausible to allow, rather, that it is at least possible that I may be thinking that politicians lie and cheat and only be engaged in one event of thinking.

But (DIST) (the distribution rule employed in Argument 1; see Chapter 4, p.36) will still yield the result that I may be said not only to be thinking that politicians lie and cheat but also to be thinking that politicians lie, and to be thinking that politicians cheat. If all three of these ascriptions are indeed true relative to the imagined circumstance in which I am engaging in only one noetic event, then I take it that this one event of thinking may be characterized as an event of my thinking that politicians lie and cheat, as an event of my thinking that politicians lie, and as an event of my thinking that politicians cheat. Then there would be three thoughts associated with a single noetic event in the manner in question. Since I am somewhat inclined to think that such cases are possible, I do not propose to accept:

$$(8) \quad \text{nec}_{\text{gen}} \forall e ( e \text{ is a noetic event} \rightarrow \forall y \forall y' ( \exists x ( \exists z [x \text{ is thinking } y'] \text{ characterizes } e) \rightarrow y' = y ) )$$

There are certain essential characteristics of noetic events that are worth noting here. In general, no matter what sort of event is at issue, I assume the subjects of events to be essential to them. Consequently, in the case of noetic events, I suppose that if a person is the subject of such an event, the event is essentially such that that person is its subject:

$$(A14) \quad \text{nec} \forall e ( e \text{ is a noetic event} \rightarrow \exists x ( x \text{ is the subject of } e \ \& \ \text{nec} ( e \text{ exists} \rightarrow x \text{ is the subject of } e ) )$$

I assume, further, that noetic events are essentially events of thinking, each an event of a person doing some thinking. We may indicate that an intransitive reading is called for by affixing an 'i' subscript to a verb. Then what I propose to accept is:

(A15)  $\text{nec } \forall e( e \text{ is a noetic event} \rightarrow \text{nec}( e \text{ exists} \rightarrow \exists z[\text{the subject of } e \text{ is thinking}_i] \text{ characterizes } e ))$

However, it is another matter whether a noetic event is essentially an event of someone thinking something! More specifically, it is not clear to me that every noetic event,  $e$ , is essentially such that for some  $x$  and  $y$ ,  $e$  is an event of  $x$ 's  $\text{gen}$ thinking  $y$ :

(9)  $\text{nec } \forall e( e \text{ is a noetic event} \rightarrow \text{nec}( e \text{ exists} \rightarrow \exists x \exists y( \exists z[x \text{ is } \text{gen} \text{thinking } y] \text{ characterizes } e )))$

The sorts of considerations that lead me to question (9) have to do with cases of another sort alluded to in Chapter 4. At one point in section 4.2, I was concerned to give some idea of the grounds I had for doubting whether the following rule is valid:

$$\begin{array}{l} x \text{ is thinking}_i \\ \hline \therefore \exists y( x \text{ is thinking}_t y ) \end{array}$$

(where the 't' subscript indicates a transitive reading). I described a case (pp.9-10, 4.2) that had to do with an

antique furniture connoisseur, Max, who was having a very vivid hallucination of an 1870's vintage Chippendale chair. Now imagine a somewhat different situation: suppose that the circumstances in which Max finds himself really are as he mistakenly took them to be in the original case of hallucination. In other words, imagine that Max really is looking at an 18th century Chippendale and is thinking, concerning that chair, that it is a mint-condition Chippendale. The "text" of his thinking, so to speak, may be precisely the same as that in the original case of hallucination. With respect to at least some cases fitting the present description, however, it is clearly correct to say that Max is thinking something. Indeed he is thinking a thing expressed by the sentence

That is a mint-condition, late 70's Chippendale

(with respect to suitable contexts). Let us call this thought that Max is having, " $T_m$ ". I think it is intuitively plausible to suppose that there is a particular mental event in which Max is engaging in this situation, an event that we are referring to if, speaking of this situation, we were to speak of "the event of Max's thinking  $T_m$ ". And concerning this event, it is simply not clear to me whether or not we should say that it--that very event--can possibly occur in circumstances of the sort originally described, where Max is only having an hallucination of a chair, where there isn't anything that Max is thinking at all. Couldn't this very

event be the one we would be reporting in such circumstances were we to say:

Max is thinking: *that is a mint-condition late  
70's Chippendale*

If this is a possibility, then it would be a case in which an event of a person's thinking something--Max's thinking  $T_m$ --is possibly such that it occurs without there being anything that the subject is thinking.

One might be tempted here to respond that if the event we're speaking of in the non-hallucinatory case is really one properly described as an event of Max's thinking  $T_m$ , then surely for that very event to occur is for Max to be thinking  $T_m$ . Surely, one might say, the event, Max's thinking  $T_m$ , is necessarily such that if it occurs, Max is thinking  $T_m$ . However, I can see no non-question-begging grounds for supporting this contention. The event, by hypothesis, is one in fact characterized by the property of being such that Max is thinking  $T_m$ . Can we infer from this much that the event is necessarily such that if it occurs, Max is thinking  $T_m$ ? I do not know.<sup>10</sup>

Considerations along these lines are what lead me to suspend judgement on two claims formulated in the preceding subsection. There is the matter of whether, if a property characterizes an event, that event is essentially characterized by the property--of whether we should accept the thesis formulated in (7). Also there is the matter of

whether a property, P, that characterizes an event is necessarily such that if the event occurs, the subject of the event has P (in cases where the event has unique subjects)--of whether we should accept the thesis formulated in (4). Since (4) can be derived from (7) (in the presence of some assumptions that I have made or am willing to make), to show that this case concerning Max's thinking  $T_m$  undermines both claims, it will suffice to see that it calls into question the claim expressed by (4). So note that the following is a consequence of (4):

(4')  $\text{nec } \forall e( \exists z[\text{gen}^{\text{thinking}}(\text{Max}, T_m)] \text{ characterizes } e \rightarrow \text{nec}( e \text{ occurs } \rightarrow \text{Max has } \exists z[\text{gen}^{\text{thinking}}(\text{Max}, T_m)]))$

But if the case described above is indeed possible, then it is possible that there be an event of Max's  $\text{gen}^{\text{thinking}} T_m$  (i.e., characterized by the property of being such that Max is  $\text{gen}^{\text{thinking}} T_m$ ) that is possibly such that it occurs, though its subject, Max, is not thinking  $T_m$  or any other thought. If such a case is indeed a possibility, then (4'), and consequently (4) and (7), do not express truths.

I have noted that, in light of (D13), every noetic event may be associated with at least one thought: any thought, y, such that the event is one of x's thinking y, for some person x. My hunch is that if one is not committed to the view that each thought associated this way with a noetic event, e, is one of the objects of e--if one does not presume that the thought is as much a constituent of the

activity of which e consists as is the subject of e--then one will be less inclined to suppose that e is essentially associated in the way in question with each such thought. On the view I am proposing, thoughts are not objects, nor constituents of any other sort, of events of thinking. In section 9.5, I shall address the question of what sort of things do occupy the role of object in noetic events.

In passing it is worth noting that the putative possibility that leads me to question (4), (7) and (9), does not undermine (A15). For I assume that whether Max is hallucinating or not, if it is correct to say "Max is thinking: *That is a mint-condition, late 70's Chippendale*", then Max is doing some thinking--he is thinking<sub>i</sub>.

I shall make one further assumption concerning noetic events before proceeding. Nothing in what has been explicitly assumed so far guarantees a certain connection that exists between a person's <sup>gen</sup>thinking a thing, and the occurrence of a noetic event characterized by that person's <sup>gen</sup>thinking that thing:

(A16)      nec  $\forall x \forall y ( x \text{ is } ^{\text{gen}}\text{thinking } y \rightarrow$   
 $\exists e ( \exists z [x \text{ is } ^{\text{gen}}\text{thinking } y] \text{ characterizes } e \ \&$   
 $\qquad \qquad \qquad x \text{ is engaging in } e ) )$

The assumption implies that if a person may be said to be <sup>gen</sup>thinking something, then there is a noetic event that is occurring and has that person as subject. A related thesis may be put

(10)  $\text{nec } \forall e ( e \text{ is a noetic event} \rightarrow \exists x \exists y ( x \text{ is engaging in } e \rightarrow x \text{ is } \text{gen}^{\text{thinking } y} ) )$ .

(10) follows from (A10), (A12) and (A13).

#### 9.2.4 Types and Instances

There is a distinction commonly drawn in philosophy between concrete, particular events, and items that are sometimes spoken of as "event types". Perhaps the same distinction is intended when philosophers have spoken of distinguishing concrete events from generic events. I'm not sure. At any rate, for the moment I shall assume that the reader is familiar enough with the concept of a **type**. On my usage, 'type', 'sort' and 'kind' are all more-or-less interchangeable expressions that apply to the same bunch of things. I am not sure of the precise features of our ordinary concept of a type. In the present study I propose to adopt a somewhat regimented notion, and I shall be restricting my attention to types of event, and a rather select group of such types, at that. A little later on, I shall have more to say about what sort of thing I understand 'types' (and specifically, 'event types'), to refer to, in this regimented sense.

Types of event may be said to have particular events as their instances just as types of tiger may be said to have particular tigers as their instances. I take this relation of instantiation as a primitive. On the usage I propose, only types are possibly instantiated. So I am assuming:



(A17)      nec  $\forall x( \text{pos } \exists y( y \text{ instantiates } x ) \rightarrow x \text{ is a type} )$

I do not suppose that all types of events have instances. Also, I do not suppose that among event types that do have instances, their instances all occur; I am prepared to allow that there are some types none of whose instances in fact have occurred or ever will occur. Furthermore, I do not assume that events instantiate their types essentially--if an event happens in fact to be an instance of a given type, I do not take it to follow from this that wherever it exists (nor even wherever it occurs) it instantiates that type. Thus I do not accept any of the following (here and in what follows, I use T-variables to range exclusively over event types):

(11)      nec  $\forall T( \text{pos } \exists e( e \text{ instantiates } T ) )$

(12)      nec  $\forall e \forall T( e \text{ instantiates } T \rightarrow e \text{ has occurred or will occur } )$

(13)      nec  $\forall e \forall T( e \text{ instantiates } T \rightarrow \text{nec}( e \text{ exists } \rightarrow e \text{ instantiates } T ) )$ ,

#### 9.2.5 Noetic Event Types

I assume that among all the various types of event, some are types of noetic event. I'm afraid that again I cannot offer any useful set of necessary and sufficient conditions for what I shall mean when I speak here of "noetic event types". I assume that noetic event types can only be instantiated by noetic events:

(A18)         $\text{nec } \forall T( T \text{ is a noetic event type } \rightarrow \text{nec } \forall e( e \text{ instantiates } T \rightarrow e \text{ is a noetic event } ))$

I also suppose that among the things that I would count as event types at all, any that are instantiable and can only be instantiated by noetic events are noetic event types:

(A19)         $\text{nec } \forall T( ( \text{pos } \exists y( y \text{ instantiates } T ) \& \text{nec } \forall y'( y' \text{ instantiates } T \rightarrow y' \text{ is a noetic event } ) ) \rightarrow T \text{ is a noetic event type } )$

But informative, necessary and jointly sufficient conditions elude me. The problem is that on the conception of types to be proposed below, there are many eventtypes that are not possibly instantiated that I would not wish to count as types of noetic event. So the condition expressed in the consequent of (A18) is not sufficient. On the other hand I do not wish to rule out that there are noetic event types that are themselves uninstantiable. Consequently, the condition expressed in the antecedent of (A19) is not necessary. I can offer some examples of instantiable noetic event types, and I shall have to hope that this serves to convey the idea.

I assume that among noetic events, some are events of persons occurrently believing that politicians lie and cheat, some are events of persons imperatively wishing that Sarah would say "yes" (for some given Sarah), and others are events of persons wondering whether Jones will arrive on time (for some given Jones). And I assume that in each of

these cases, the noetic events of which we speak instantiate a noetic event type: there is, for example, a type necessarily such that it is instantiated by all and only occurrent believings that politicians lie and cheat, a type of imperative wishings, necessarily such that it is instantiated by all and only imperative wishings that Sarah would say "yes", and so on. In each of these cases, an instantiable noetic event type is in question: a type of event that is possibly instantiated and is necessarily such that, for some thought,  $x$ , any events instantiating that type are events of persons  $gen$ thinking  $x$ .

Let us say that an event type is a "\*correlate" of a thought, according to the following:

(D14)  $T$  is a \*correlate of  $x$  =df  $T$  is a noetic event type & nec  $\forall e (e$  instantiates  $T$  iff  $\exists y (\exists z [y$  is  $gen$ thinking  $x]$  characterizes  $e$  ) )

Roughly, a \*correlate of a thought,  $x$ , is a noetic event type necessarily such that all and only events instantiating it are events of persons  $gen$ thinking  $x$ .

I assume that there are noetic event types and thoughts related in this way. Take for example, a type suggested above--one necessarily such that it is instantiated by exactly those events of persons occurrently believing that politicians lie and cheat. I take it that any such noetic event type is a \*correlate of the thought, call it " $T_{p|c}$ ", that politicians lie and cheat. Relative to any possible

situation, any instance of such a type will be an event satisfying the following (for 'e'):

$$\exists y(\exists z[y \text{ is } \text{gen}^{\text{thinking}} T_{p|c}] \text{ characterizes } e)$$

I do not assume that for every noetic event type there is a thought of which it is a \*correlate. On the conception of types to be proposed below, I will not wish to rule out that there are disjunctive event types, instantiated as well by events of  $\text{gen}^{\text{thinking}} x$  and by events of  $\text{gen}^{\text{thinking}} y$ , for distinct thoughts,  $x$  and  $y$ . If we must admit such types, then I would be inclined to hold that some of them are noetic event types. But we couldn't say, of any such noetic event type,  $T$ , that there is any thought such that an event instantiates  $T$  iff the event is one of a person's thinking that thought. Then such a type is not a \*correlate of any thought. So I shall not assume

(14)  $\text{nec } \forall T( T \text{ is a noetic event type} \rightarrow \exists x( T \text{ is a } * \text{correlate of } x ))$

However, I do propose to assume that for every thought, there is a \*correlate:

(A20)  $\text{nec } \forall x( x \text{ is a thought} \rightarrow \exists T( T \text{ is a } * \text{correlate of } x ))$

This is a very substantial assumption, and the conception of thoughts that I shall be laying out in the next sections hinges on it.

Actually, on the conception of types to be proposed below, it is not plausible to suppose that every thought has some unique type \*correlated with it. However, I have not been able to envision any case concerning which it would be intuitively plausible to say that there are several thoughts sharing a \*correlate, apart, perhaps, from vacuous cases where the type is uninstantiable.<sup>11</sup> If there were any non-vacuous cases, they would be ones in which some single noetic event type (that can be instantiated) is necessarily such that it is instantiated by all and only events of thinking x, and at the same time necessarily such that it is instantiated by all and only events of thinking y, where x and y are distinct thoughts. Then there would have to be two thoughts such that all events of thinking the one were events of thinking the other and vice-versa. I do not say that this is impossible. But I have not been able to imagine such a case.

With the foregoing concepts and assumptions addressed, let us turn to the matter of which category of entities it is that thoughts are supposed to comprise, according to the alternative to the Propositional Tradition that I wish to consider.

#### 9.2.6 A General Category for Thoughts

According to the alternative I wish to consider, the things we refer to when we speak of "thoughts" in the shareable sense of that term just are noetic event types.

In particular, every thought is identical to one of its \*correlates.

Let us say that a person is an "instancer" of a type of event, according to:

(D15)  $x$  is an instancer of  $T$  =df  $x$  is engaging in an instance of  $T$

An instancer of an event type, then, is a subject of an occurring event that instantiates that type. It may be noted that if a noetic event type is \*correlated with a thought, a person will be an instancer of that type iff he or she is <sup>gen</sup>thinking that thought:<sup>12</sup>

(15)  $\forall x \forall T ( T \text{ is } * \text{ correlated with } x \rightarrow \text{nec } \forall y ( y \text{ is an instancer of } T \text{ iff } y \text{ is } ^{\text{gen}} \text{ thinking } x )$

Let us adopt:

(D16)  $x$  is an instancer\* of  $T$  =df  $x$  is an instancer of  $T$  &  $\exists y ( T \text{ is } * \text{ correlated with } y )$

The relation defined here is just the "instancer" relation with its range restricted to types that are \*correlates. In light of (15), it can be seen that this relation and the attitude of <sup>gen</sup>thinking require one another (the notion of requirement is defined in (D6), Chapter 4, p.30):

(16) i)  $\text{nec } \forall x \forall y \text{ nec} ( x \text{ is an instancer* of } y \rightarrow \exists y' ( x \text{ is } ^{\text{gen}} \text{ thinking } y' ) )$ , and  
 ii)  $\text{nec } \forall x \forall y \text{ nec} ( x \text{ is } ^{\text{gen}} \text{ thinking } y \rightarrow \exists y' ( x \text{ is an instancer* of } y' ) )$

Indeed the two relations are more closely linked than this. Necessarily, any two persons are <sup>gen</sup>thinking something in common iff they are both instancer\*s of a common \*correlate:

(17)  $\text{nec } \forall x \forall y ( \exists z ( x \text{ and } y \text{ are } \text{gen} \text{ thinking } z ) \text{ iff } \exists z ( x \text{ and } y \text{ are instancer*s of } z ) )$

There is then a close connection between these two relations.

A parallel closeness exists between the attitude of occurrent belief and the relation, let us call it "R", defined

$R(x,y) =df$  x is occurrently believing something with content y

Then the following expresses a truth:

(18)  $\text{nec } \forall x \forall y ( \exists z ( x \text{ and } y \text{ are occurrently believing } z ) \text{ iff } \exists z ( R(x,z) \text{ and } R(y,z) ) )$

It was upon having noted this equivalence in the case of belief, that the R\*SS\*LL in my fable from the preceding section was led to make what I called "R\*SS\*LL's step", that led him and his followers to equate the things "judged" with the items in the modal range of R. The step may be seen as that of moving from what is formulated in (18) to the stronger thesis expressed by:

(19)  $\text{nec } \forall x \forall y ( x \text{ is occurrently believing } y \text{ iff } R(x,y) )$

A similar move is made on the alternative view of thoughts we are about to consider. But on this view, thoughts generally (and things occurrently believe, in particular) are not equated with contents. Rather, the view holds that there is a distinguished subset of \*correlates such that, with their modal ranges restricted to that subset, the instancer relation is equivalent to <sup>gen</sup>thinking. The step made on this view, then, is that from the thesis formulated in (17), to the stronger claim, that there is a distinguished subset of \*correlates, each member of which satisfies (for 'x'):

(20)  $\text{nec}_{\text{gen}} \forall y (y \text{ is an instancer of } x \text{ iff } y \text{ is thinking } x)$

Then what you're <sup>gen</sup>thinking just is one of these distinguished \*correlates of which you are an instancer. That, at any rate, is a consequence of the view we are about to consider.

There are, however, many noetic event types that are not counted as thoughts, according to the view I propose. And I suggested above that on the development of the view I am about to undertake, it will be plausible to think that for each thought, there are many \*correlates. Plainly only one can be identified with the thought. In the following section, I propose to provide a somewhat fuller account of what I mean by "type of event". Then, within this fuller account, I wish to give a more precise specification of



certain classes of noetic event types that I take to be thoughts. In section 9.4, I shall turn to the task of explaining what motivation there is for at least considering the unorthodox proposal that such things are thoughts.

### 9.3 Some Details of the New Proposal

#### 9.3.1 A Review of Where Things Stand

For convenience, let me use the labels, "OB", "IW" and "WN" for the modal ranges of occurrent belief, imperative wishing and occurrent wondering, respectively. So OB contains all and only occurrent beliefs, IW contains all and only imperative wishes (wishes in the modal range of imperative wishing) and WN includes all and only questions. We have seen that if the considerations raised in Chapter 8 are accepted, then things other than propositions must be identified as the items making up IW and WN. Let me briefly discuss a couple of ways that this can be accomplished, but that I do not consider attractive.

i) We could retain one of the standard conceptions of propositions as an account of the nature of occurrent beliefs--taking them to be, say, sets of worlds, or Russellian complexes, and suppose that imperative wishes and questions fall under some other genus of thing (or perhaps under separate genera).

But this is not intuitively appealing. Better to have new accounts for propositions/occurrent beliefs as well;

accounts according to which there is some category that can be seen to subsume all of OB, IW and WN (some genus a little narrower though, than say, that of entities or existents, a genus including all but only thoughts).

ii) Since the items in each of OB, IW and WN are distinguished from the members of either of the other two sets according to the attitudes one may bear to them, we could artificially concoct a species of thing that would at least serve to represent each of these species of thoughts. For example, we could use the three attitudes themselves as tags or indices, taking thoughts to be ordered pairs of attitude and content, where the content is understood to be a thing of the sort that the standard view equates with propositions. So, for example, if we took contents to be sets of worlds, we would have it that thoughts could be represented by pairs of attitude and set of worlds, the attitude in a given pair serving as an index marking what species of thought the represented thought belongs to. In particular, we could have the following sorts of pairs, all with sets of worlds as their second members:

- a. propositions/occurrent beliefs represented by pairs, each with the attitude of occurrent belief as first member,
- b. imperative wishes represented by pairs, each having as its first member the attitude of imperative wishing,
- c. questions represented by pairs, each with the attitude of occurrent wondering as its first member.

But this representation is not very natural. Having such a concocted variety of object serving to represent thoughts, we will not be in much of a position to predict any further features that thoughts have by appeal to any features that the representatives are known to have.

Noetic event types, I believe, are items that display the very features that we would be seeking to represent by employing the artificial representation afforded by taking thoughts to be ordered pairs of attitude and content. I assume that types of occurrent believings, wishings, and wonderings make up pairwise disjoint groups. So we have, in effect, a distinction according to attitude. And within any of these groups, say among types of wishings, types will be further distinguished from one another according to content: wishing that Jones would arrive on time is one type of wishing, wishing that Sarah would say "yes" is another type. The two types are distinguished by what circumstance it is that is being wished to be the case when events of either one or the other type occur. In effect, then, we have a distinction according to content.

The account to follow is restricted to the case of occurrent beliefs (members of OB), imperative wishes (members of IW), and questions (members of WN), and it will not be a complete account even for the thoughts in these select groups. No informative set of necessary and jointly sufficient conditions will be provided for a thing's being a

thought, nor even for a thing's being an occurrent belief, imperative wish or question. But I think the account to be offered covers enough cases that it will serve to illustrate the leading ideas of the approach.

I shall begin by explaining what I take types to be.

### 9.3.2 Types

The concept of type that I intend when I propose that there are types of noetic event, and that thoughts are such things, is a familiar one. We commonly speak of types of dances, types of tigers, types of people, and I assume that there is a single concept of type involved in such talk. I do not claim that it is a thoroughly clear notion. And what I wish to do presently is suggest a somewhat regimented conception that one gets by adopting a certain account of the nature of types. It may be that some other way of accounting for our ordinary notion of type would be philosophically preferable. But I would hope that any acceptable account would serve our purposes here well enough, though I can't be sure of this. The conception afforded by the following account does serve our purposes well enough.

I take types to be properties. More specifically, when we speak of types of *cns*, for common noun, *cn* (types of dances, types of tigers, types of people), I am supposing that we are speaking of properties of a sort to be had by *cns* (of a sort to be had by dances, tigers, people), and

that the relation of instantiation that I have taken as a primitive is just the relation of exemplification (restricted to those properties that are types).

The contention from the previous section was that thoughts are certain types of noetic event. On the view of types I am now suggesting, this contention amounts to the claim that thoughts are certain properties of noetic events. Before proceeding to give an idea of which properties I count as thoughts, let me say a little more, in a general way, about what I am not going to be assuming, given this conception of types as properties.

I don't suppose that just any property had, say, by tigers, is a type of tiger. For example, presumably no property, T, should count as a type of tiger if it is possibly exemplified but also such that for any x that exemplifies it, necessarily x and x alone exemplifies it. In general, then, I think it would be plausible to suppose

(21)         $\text{nec } \forall P( P \text{ is a type } \rightarrow \text{nec } \forall x( x \text{ has } P \rightarrow$   
               $\text{pos } \exists y( y \text{ has } P \ \& \ y \neq x ))$

We may wish to grant that there are types that are possibly or perhaps are in fact uniquely instantiated, but if a property is to count as a type it should be possible that more than one thing instantiate it. Some properties are distinguished from others by the fact that they are possibly exemplified.. But I have not assumed that types are possibly instantiated, so I shall not assume

(22)         $\text{nec } \forall P( P \text{ is a type } \rightarrow \text{pos } \exists x( x \text{ has } P ))$

Some properties are such that anything that has them has them essentially, but I have proposed not to assume that types of events are essentially instantiated by the events that in fact instantiate them. Finally, then, I am not going to assume:

(23)         $\text{nec } \forall P \forall x ( P \text{ is a type } \& x \text{ has } P \rightarrow \text{nec}( x \text{ exists } \rightarrow x \text{ has } P ))$

### 9.3.3 Attributing, Prescribing and Querying

I will focus attention on a certain group of occurrent believings, imperative wishings, and wonderings, and some of their properties. But to get at which occurrent believings, imperative wishings, and wonderings will be at issue, and which of their properties I wish to attend to, I am going to begin by confining attention to the case of occurrent belief.

I assume that there are noetic events each of which may be said to be one of a person's attributing a property to an object. In ordinary language we count events of a very wide variety as attributings; acts of asserting, in particular, may properly be said to be attributings. But among noetic events, I claim, any event of attributing is an occurrent believing. These, in turn, are the occurrent believings to which I mean to attend. A paradigm case of the occurrent believings I have in mind are ones that might be termed,

"directly referential" occurrent believings or attributings:  
noetic events correctly reported by ascriptions of the form

(F1)        t is thinking: t\* is  $\emptyset$

where substituends of 't\*' are directly referential terms,  
and the displayed sentences express things that are true or  
false (wrt the appropriate context). Or to get at the same  
sort of events another way: the events in question are ones  
such that in virtue of their occurrence, the subjects of the  
events may be said to be having occurrent beliefs accurately  
expressed by sentences of the form:

(F2)        t\* is  $\emptyset$

where again, substituends of 't\*' are directly referential  
terms, and the instances express things that are true or  
false (wrt an appropriate context). Concerning such cases,  
the assumption is that the occurrent believing is an  
attributing of a property to an object: the property  
attributed is the one expressed by the relevant substituend  
of 'is  $\emptyset$ ', and the item to which this property is being  
attributed is the thing denoted by the relevant substituend  
of 't\*'. I think the sort of events at issue could be  
broadened by including as well any occurrent believing that  
could be viewed as an attributing of a property to several  
things, or as an attributing of a relation to objects in a  
sequence. However, I shall confine attention here to cases  
of attributing properties to single objects.

As an example, consider an event that we might report by saying "O'Brien is thinking: *Jones will arrive on time.*" This event of occurrent believing, on the present assumption, is an event of O'Brien's attributing the property of arriving on time to Jones. If William is thinking: *You will not say "yes"*, meaning Sarah by 'you', then the present view has William engaged in an event of his attributing a property--being an x such that x will not say "yes"--to Sarah.

I take the property attributed to be the object of the event of attributing, and I shall speak of the thing to which the property is attributed as the "indirect object" of the event. Since, on the present proposal, occurrent believings just are (a certain subset of attributings) and occurrent believings are events of <sup>gen</sup>thinking, we have the result that events of <sup>gen</sup>thinking may have objects and indirect objects. But the object of such a thinking is a property; it will not be an item of the sort ordinarily intended by the philosophical usage of 'object of thought'. That's why I proposed not to use "object of thought" as a technical term for thoughts here. The usage encourages the idea that thoughts are being taken to be objects of thinkings, which I believe is in general false.

Now I propose to do in the case of imperative wishings and wonderings, what I have done above in the case of occurrent believings. I shall assume that certain



imperative wishings are events of a person's bearing a particular relation to a property, P, and some item, x, in virtue of bearing which relation, the person may be said to be imperatively wishing that x have P. Similarly for wonderings: I assume that certain wonderings may be said to be events of a persons bearing a particular relation to a property, P, and some item, x, in virtue of bearing which relation, the person may be said to be wondering whether x has P. So far as I know, there are no verbs in English expressing the relations that I am proposing that we acknowledge--no verbs that (so to speak) are to either 'wishes' or 'wonders' as 'attributes' is to 'occurrently believes'. But I assume that there are such relations; I propose to use the following locutions to express them:

x prescribes P for y

x queries P of y

I am assuming then that there are imperative wishings that are prescribing of properties for things, and that there are wonderings that are querying of properties of things. I shall suppose that prescribing and querying may be said to have objects and indirect objects in exactly the same sense that attributings may be said to. The object of an event of prescribing (querying) is the property prescribed (queried) and the indirect object of a

prescribing (querying) is the thing to which the object is prescribed (queried).

#### 9.3.4 Some Formalities

I shall suppose that being an attributing, being a prescribing, and being a querying are properties of noetic events. And I shall suppose that for any property, P, and any sort of item, x, the following are also properties of noetic events: being an event having P as its object and being an event having x as its indirect object. To express such properties in formulations to come, I propose to use the following predicates:

- a. 'ATTRIBe' for 'e is an attributing'
- b. 'PRESCRBe' for 'e is a prescribing'
- c. 'QUERYe' for 'e is a querying'
- d. 'OBJ(e,P)' for 'P is the object of e'
- e. 'indOBJ(e,x)' for 'x is the indirect object of e'

Then we may employ  $\lambda$ -expressions of the following forms; I shall take them to be terms designating the properties of noetic events cited above:

- a.  $\lambda e[ \text{ATTRIB}e ]$ ,    b.  $\lambda e[ \text{PRESCR}Be ]$ ,    c.  $\lambda e[ \text{QUERY}e ]$ ,
- d.  $\lambda e[ \text{OBJ}(e, \emptyset) ]$ ,    e.  $\lambda e[ \text{indOBJ}(e, t) ]$ .

where substituends of ' $\emptyset$ ' are singular terms for properties, and substituends for 't' are any singular terms.

I assume that there are conjunctive properties uniquely related to other properties--their conjuncts--by a relation of conjunction, and I assume that any bunch of properties has a unique conjunction. Also, if the  $\lambda$ -expressions,  $\lambda v[\emptyset_1], \dots, \lambda v[\emptyset_n]$ , denote the properties,  $P_1, \dots, P_n$ , respectively, then I shall suppose that

$$[ \lambda v[ \emptyset_1 \ \& \ \dots \ \& \ \emptyset_n ] ]$$

denotes the conjunction of  $P_1, \dots, P_n$ .

Then, for any property,  $P$  and object,  $x$ , there is a unique conjunction of the following three properties:

$$\lambda e[ \text{ATTRIBe} ], \quad \lambda e[ \text{OBJ}(e,P) ], \quad \lambda e[ \text{indOBJ}(e,x) ]$$

Likewise, for any property,  $P$ , and object,  $x$ , there is a unique conjunction of each of the following two trios of properties:

- i)  $\lambda e[ \text{PRESCRBe} ], \lambda e[ \text{OBJ}(e,P) ], \lambda e[ \text{indOBJ}(e,x) ]$
- ii)  $\lambda e[ \text{QUERYe} ], \lambda e[ \text{OBJ}(e,P) ], \lambda e[ \text{indOBJ}(e,x) ]$

I assume that the three conjunctive properties of events at issue here are noetic event types. Then we may put the following as existence axioms:

- (A21) a.  $\forall P \forall x \exists ! T ( T = \lambda e[ \text{ATTRIBe} \ \& \ \text{OBJ}(e,P) \ \& \ \text{indOBJ}(e,x) ] )$
- b.  $\forall P \forall x \exists ! T ( T = \lambda e[ \text{PRESCRBe} \ \& \ \text{OBJ}(e,P) \ \& \ \text{indOBJ}(e,x) ] )$
- c.  $\forall P \forall x \exists ! T ( T = \lambda e[ \text{QUERYe} \ \& \ \text{OBJ}(e,P) \ \& \ \text{indOBJ}(e,x) ] )$

### 9.3.5 The Proposal

According to the account I am proposing, any type obtained directly from (A21) a. - c. is a thought. In particular, the thoughts obtained from a. - c., for any given P and x, are (respectively) an occurrent belief (member of OB), an imperative wish (member of WS) and a question (member of WN). Thus, the account proposes the following as sufficient conditions for being an occurrent belief, an imperative wish, or a question:

Thesis 4  $\text{nec } \forall P \forall x \forall T$

- a. if  $T = \lambda e [ \text{ATTRIB}e \ \& \ \text{OBJ}(e,P) \ \& \ \text{indOBJ}(e,x) ]$  ),  
then T is an occurrent belief;
- b. if  $T = \lambda e [ \text{PRESCR}Be \ \& \ \text{OBJ}(e,P) \ \& \ \text{indOBJ}(e,x) ]$  ),  
then T is an imperative wish, and
- c. if  $T = \lambda e [ \text{QUERY}e \ \& \ \text{OBJ}(e,P) \ \& \ \text{indOBJ}(e,x) ]$  ),  
then T is a question.

Intuitively, the thoughts identified in each clause, for given P and x, are the occurrent belief that x has P, the imperative wish that x have P, and the question whether x has P, respectively. If I am occurrently believing that Sarah is saying "yes", and William is occurrently believing this too, then William and I have a thought in common. According to the present account, this is equivalent to saying that there is a noetic event type of which both you and I are instancers. And indeed we are both instancers of a common type in these circumstances: we are both attributing the property of saying "yes", and we are both attributing that property to Sarah. Hence we are both

instancers of the type:

$\lambda e[ \text{ATTRIBe} \ \& \ \text{OBJ}(e, \lambda x[ x \text{ is saying "yes" } ]) ] \ \& \ \text{indOBJ}(e, \text{Sarah}) ]$

According to the present account, this noetic event type just is a thought that we have in common.

The starting question of the present study may be put in various ways: What sort of things are we referring to when we speak of what a person is thinking? What sort of item is it that comprises the modal range of the relation expressed on their relational reading, by progressive forms of 'think'? What are the "objects" of thinking? The answer that is proposed above--that the things in question are types of events of thinking--is certainly unorthodox. But the proposal finds some support in the case of other verbs. The fact is that there are other event verbs that admit complements that are plausibly understood as designating types of events of the very sorts to which those verbs apply.

#### 9.4 Precedent for Types as "Objects" of Event Verbs

##### 9.4.1 Cases Where Complements do not Apply to Constituents

I believe that there are many examples of event verbs in English each of which,  $V$ , has a relational reading,  $r$ , with the following property: there are sentences each one of which,  $\emptyset$ , is such that i)  $\emptyset$  has  $V$  as its main verb and a

referring term (or a quantifier phrase),  $t$ , as a complement of  $V$ , and ii) on any of the interpretations of  $\emptyset$  involving  $r$ , if  $\emptyset$  expresses a truth, it reports an event, but iii) a reading of  $t$  involved in at least some of these interpretations of  $\emptyset$ , is one on which the term is not plausibly seen as designating (or ranging over) constituents of events reported by  $\emptyset$  on those interpretations. This is a complicated relationship; so let me try to convey the idea by way of some examples.

The verb 'dance' is a case in point that I have alluded to before. The verb has a transitive reading displayed in the following sentence:

(24) Jones is dancing a tango.

Let us suppose that there is presently an event occurring that is reported by this sentence, that the Jones denoted by the subject term is actually dancing a tango. The complement of (24) does not range over any objects of the event reported by the sentence. The event reported by (24) is a particular instance of dancing on Jones' part. The event has no constituent in the role of object; at least that is what I am inclined to say about such an event. If what I'm inclined to say here is right, then whatever items are in the range of the quantifier phrase 'a tango' are not objects of that event.

Similar remarks apply to the reading of the verb 'run' called for by its occurrence in

(25) William ran the 60th Boston Marathon.

Again, a reading is called for on which available complements--the complement appearing here in (25) is one example of many--do not refer to constituents of the events reported. As in the case of dancings of tangos, I'm inclined to say that instances of running the 60th Boston Marathon are not events that have constituents in the role of object. But in any case, surely 'the 60th Boston Marathon' denotes no such constituent of these events.

The two cases just considered are instances of a phenomenon that is very common--it is not restricted to verbs that apply just to events lacking object constituents. The verbs, 'hit' and 'serve', for instance, both have readings that afford further examples, though the events we refer to when we speak of "hittings" and "servings", in the relevant sense, are events that do, intuitively, involve constituents in the role of object.

Here is a such a case; consider:

(26a) Sarah served an ace.

Assume that this sentence reports an event, and suppose that the reported event has taken place in a tennis match. I assume that the event in question is a fairly complex bit of activity involving Sarah's hitting a tennis ball in such a

way that it clears the net, hits the appropriate portion of the court on the side opposite Sarah, and is not returned by Sarah's opponent.

The intuitive notion of a thing's being a constituent of an event does not apply clearly in all cases, and the present example is one case where the application of this concept is certainly not clear. What things should be said to be constituents of services in a tennis match? I think it is clear enough that such events have subjects--the persons responsible for the activity, the servers. So Sarah is one constituent of the event in question. On the loose characterization of the role of object I offered in Chapter 1--constituents that bear "the brunt" of the activity of which the event consists--it would seem plausible enough to say that the tennis ball that Sarah served was an object of her service reported by (26a). But perhaps there are other items that should be counted as constituents of services, other constituents in the role of object.

At any rate, it does seem clear that events of serving themselves should not be said to be constituents of events of serving. But the complement in (26a), 'an ace', ranges over just such events. The ace Sarah served is precisely the event reported by (26a). So there is a reading of the verb 'serve' on which it takes a complement not designating (or ranging over) constituents of the events reported by sentences calling for that reading.



It is worth contrasting the reading of 'serve' called for by (26a) with that called for by

(26b) Sarah served that tennis ball I spray-painted purple.

Here, the reading called for is one on which it would be plausible to say that the verb takes a complement designating a constituent of the event reported.

And I suppose that remarks parallel to those just made concerning the readings of 'serve' as it figures in (26a) and b) apply concerning the readings of 'hit' that are most plausible for the following pair:

(27a) Sarah hit a line-drive

(27b) Sarah hit a baseball.

In (27b), the verb calls for a reading on which it expresses a relation between persons and constituents of hittings; in (27a), the reading called for is one on which 'hit' expresses a relation between persons and things that are not constituents of hittings.

In sum, there seems to me to be a general pattern displayed by certain event verbs on certain of their readings: on those readings, the verbs take complements that do not designate (or range over) constituents of the events reported by sentences formed from those verbs.

Within the wide variety of cases conforming to this general pattern, there are many cases where, it seems to me,

the complements of the event verbs are plausibly seen as designating types of the reported events. To see just how common this particular phenomenon is, let me begin by noting a certain ambiguity attaching to complements of a sort commonly associated with the general pattern noted above.

#### 9.4.2 An Ambiguity Attaching to Verbal Nouns

I wish to draw attention to a class of common nouns having the following features: each noun, *cn*, is i) derived from some event or action verb, *V*, and is such that ii) for some singular term, *t*, and action or event verb *V'* (perhaps not *V* itself), the sentence,

[ *t V' cns* ]

is grammatical and, moreover, expresses a claim that is possibly true (where *cns* is the plural of *cn*). I shall refer to such terms as "verbal nouns"; the following are examples: 'a hit', 'a serve', 'a run', 'a dance', 'a punch', 'a hike', 'a shot', 'an experience', 'a sensation', 'a feeling', 'a sight', 'a drink'. Often such nouns may be used to refer to events; but there are exceptions. It is not clear to me, for example, that 'a drink' has a reading on which it applies to events. The common noun 'a sight' has no reading (that I know of) on which it applies, in general, to events.

With most any verbal noun, *vn*, there is associated a host of related nouns that apply to species of the sort of

things to which *vn* itself applies; I have in mind, generally, any noun, *n*, such that the following expresses a truth:

[ nec( any *n* is a(*n*) *vn* ) ]

Each of the following nouns is related in this way to a verbal noun: 'lob', 'top-spin' (to 'shot'), 'line drive', 'home run' (to 'hit'), 'ace', 'double-fault' (to 'serve'), 'swing', 'waltz' (to 'dance'), 'left-hook' 'right jab' (to 'punch'). So, for example, we have (on appropriate readings)

nec( any lob is a shot ),  
nec( any line-drive is a hit ),  
nec( any ace is a serve ),  
nec( any waltz is a dance ),  
nec( any left hook is a punch ), etc.

Let us say that if a noun has a reading on which it is thus related to a verbal noun, it is a subordinate of that noun, on that reading. A verbal noun, it may be noted, is a subordinate of itself. It may also be noted that some of the examples of subordinates just given are themselves verbal nouns; one can lob a lob, and waltz a waltz. (Although in these cases one hesitates to say that the noun is in any sense derived from the verb.)

There is a certain ambiguity attaching to verbal nouns and their subordinates. To discuss the ambiguity, I propose

to confine attention to such nouns, and their subordinates, that have readings on which they stand for events. Let us say that a common noun is an **event noun** just in case it is a subordinate of some verbal noun, *cn*, on a reading such that, on that reading, *cn* applies to events. Most of the examples of verbal nouns and their subordinates that have been considered as examples above are event nouns (though, as noted, 'sight' and perhaps 'drink' are exceptions).

The ambiguity I wish to point out hinges on two sorts of readings: the "concrete readings" and "type readings", as I shall call them. Briefly, concrete readings of event nouns are those on which the nouns apply to events--to particular instances of activity. On their type readings, such nouns apply to types of event. I am inclined to believe that readings of both sorts attach to any event noun.<sup>13</sup>

Take the case of the noun 'lob'. Singular terms formed with this noun may be used to refer to particular events of a sort that occur in tennis matches, typically when a player is returning a shot the opponent has made from the net. Consider,

"That lob was impossible to return."

With such a remark, we may well be speaking of a particular event of lobbing a ball. Then we are using the common noun, 'lob' on its concrete reading. Note that on this concrete

reading, we cannot say that two persons have the same lob. In fact, on its concrete reading we wouldn't speak of a person having a lob at all.

But there is a reading of the noun 'lob' on which it is correct to speak of a person having a lob, and to speak of several persons having the same lob--a "shareable" reading, so to speak, of the noun. "Old Hale" we might say, "had a terrific lob, it had an incredible amount of spin and always went to the far left-hand corner of his opponent's court. He could hit it from just about anywhere. It would touch ground and take off like a bullet." Here we are not speaking of any particular instance of lobbing; we are referring to a type of lob that Old Hale had down pat. When we say "That lob was impossible to return", if we are speaking of the lob old Hale used to pull off, we are using the noun 'lob' on what I am calling its "type reading".

In a large number of cases, event nouns apply, on their concrete readings, to events that are instances of the very types to which those nouns apply, on their type readings. Let me use subscripted prefixes to mark the concrete and type readings ("c" and "t", respectively). Then

That lob was a perfect example of that lob  
and

That punch was a perfect example of that punch  
may be disambiguated as follows (and only as follows, if the sentences are to be understood to express claims that are

possibly true):

That  $c$ lob was a perfect example of that  $t$ lob.

That  $c$ punch was a perfect example of that  $t$ punch.

If the claims expressed by these sentences are indeed true, then in each case, the denotation of the first occurrence of the noun phrase, with the  $c$ -prefix, is an instance of the denotation of the second occurrence of that noun phrase, with the  $t$ -prefix.

Though this relationship between the concrete and type readings of event nouns holds in many cases, there are exceptions: 'dance' has a concrete reading, but on that reading it does not stand for items that are instances of the types for which it stands on its type reading (at least not on its most familiar type reading). The  $c$ dance we went to last night is not an example of the twist, the boogaloo, the quickstep or any other  $t$ dance.

Some event nouns have more than one concrete reading each. The noun, 'run' is an example. On one reading, 'a run' stands for a particular instance of a person (or persons) running, as in

(28) Laurie and I went on a run last night, and didn't get back till after dark.

But 'run' also has a reading, distinct, I believe, from the one called for in (28), which is akin to the concrete reading of 'dance' discussed above. On this other reading,

'a run' applies to foot-races, to gatherings for the purpose of foot-racing. In one sense, then, 'run' applies to events of one or more persons running; in another sense, it applies to events that we might say include a bunch of runnings, but may well include a lot of other instances of activity, such as an official's signaling the runners to their mark, another official's recording the time of each run (in the first concrete sense), etc.

I think it is very clear that event nouns, generally, have readings distinct from their concrete readings, those that I have here been speaking of as the type readings of the nouns. And I think it plausible at least that, as I have proposed, the items to which event nouns apply on these type readings are types of event (in this connection see Carlson [1977]). A more thorough-going account of the nature of events, and of types, before this proposal can be carefully assessed. Nevertheless, we do have a rough, familiar conception of types of event, just as we have a rough, familiar conception of types of tiger, and it seems to me plausible to hold that Old Hale's lob is a type of lob (of  $\text{clob}$ , I assume), on this rough, familiar conception. And it seems to me that similar things could plausibly be said about the items to which other event nouns apply on their type readings. It seems not unreasonable to accept this as a place to start, and then seek a precise account of the nature of types that accommodates this beginning

assumption. Ordinary parlance might also allow that Old Hale's lob is a way of lobbing, a manner of lobbing, a style or sort or kind of lob (of <sub>c</sub>lob, I assume). But as I see it, these are all ways of speaking of the same sort of thing: of types of event.

#### 9.4.3 Type-Matching Readings

Next I wish to draw attention to a class of readings of event verbs; I shall refer to them as "type-matching readings", according to:

- (D17)  $r$  is a type-matching reading =df
- i)  $r$  is a relational reading of an event (or action) verb,  $V$ ;
  - ii)  $V$  expresses a relation on  $r$  whose modal range includes event types, and
  - iii) if a sentence formed from  $V$  with a referential complement denoting one of those event types,  $T$ , is true on an interpretation involving  $r$ , then that sentence, on that interpretation, reports an instance of  $T$ .

Again, the idea is somewhat involved so I shall try to convey the sort of readings in question by way of examples. I believe there are a large number of event verbs in English that admit type-matching readings.

Most of the verbs used in examples above--that take their own verbal nouns and subordinates as complements--are cases in point. We commonly speak, for example, of hitting hits, dancing dances, serving serves, shooting shots, and such like. Though the sentences, "he hit a hit", "she danced a dance", "he served a serve"--sentences in which a



verb is complemented by its own verbal noun--are certainly not commonly uttered, I take them to be grammatically acceptable and to express things that are at least possibly true. Sentences formed from these verbs together with subordinates of their verbal nouns certainly are commonplace, plainly are grammatical, and these sentences, in many cases, definitely express things that are at least possibly true. The following are examples:

- (29) Jones served an ace.
- (30) Sarah hit an incredible loop, returning that backspin serve.
- (31) William and Sarah danced a waltz
- (32) Jones shot a jumper from the line, right at the buzzer.

But if (29) - (32) express things that are possibly true, and 'ace', 'loop', 'waltz' and 'jumper' are, on suitable readings, subordinates of 'serve', 'hit', 'dance' and 'shot', respectively, then it follows that

- (33) Jones served a serve
- (34) Sarah hit a hit.
- (35) William and Sarah danced a dance.
- (36) Jones shot a shot.

express things that are possibly true as well. And even if we wouldn't be inclined to utter (33) - (36), nevertheless, if we utter (29) - (32) I think it is correct to say that we are speaking of a person serving a serve, of a person

hitting a hit, of two people dancing a dance, and of a person shooting shots.

Each of (29) - (36) may be so interpreted that their complements are understood to range over types of the very events that the sentences serve to report. I claim that the readings of the verbs involved in such interpretations are type-matching. Indeed, in all cases I have been able to think of in which an event verb figures as main verb of a sentence, and has a complement formed from an event noun derived from it, or from a subordinate of such a noun, at least one interpretation of the sentence will be one involving a type-matching reading of the main verb.

In many cases, interpretations of such sentences are available involving either the concrete or the type reading of the complement. So, for example, suppose that the following sentence expresses a truth and reports an event:

(37) He hit that lob.

On its concrete reading, 'that lob' denotes the event of hitting reported. But it may be interpreted according to its type reading, for it may be used to denote Old Hale's lob; Old Hale's lob being a  $t$ lob exemplified whenever someone hits a  $c$ lob that has just the right touches to it.

Sometimes, either the concrete or the type reading is favored. Ordinarily, talk of hitting line drives does not involve a type reading of 'line drive'. On the most natural

interpretation of the following, for example,

(38) Ruth hit a line drive to center field.

'a line drive' would presumably be understood to apply to events of hitting. But a type reading can be discerned. If Ruth had so refined his hitting of line drives that there was a particular type that seemed worthy of note, one might well find such claims being made as that expressed by

(39) There's that line drive again, he hit it to left field this time.

Here, I take it, 'that line drive' calls for a type reading, denoting a type of line drive. It is not clear to me that we must say in such cases that different readings of the verb itself are involved. It may be that the type-matching reading of the verb may be accompanied by either the concrete or the type reading of the complement.

Unlike the case of 'hit', 'serve' and 'shoot', there are some verbs with type-matching readings from which there are no verbal nouns derived that apply to the sort of events reported by sentences formed from those verbs:

(40) She landed a right upper cut square on his jaw.

(41) She planted a left in his midsection.

(42) She pulled her right hook, luckily for him; it would have done him in.

Upper cuts, lefts and right hooks are not examples of the things we refer to when we speak of landings, plants or

pulls. Nevertheless, in each of (40) - (42), the event reported is one denoted by the complement (or over which the complement ranges). So here as well, type-matching readings of the main verbs are involved.

Not all event verbs from which event nouns are derived have type-matching readings. Some serve to report events to which the derived event noun applies, but do not admit complements formed from those nouns or any of their subordinates. As we've just seen, it is acceptable to speak of planting punches, landing punches, pulling punches; but the following is anomalous:

\* She punched a left hook

If this sentence manages to express anything at all, what it expresses is at any rate not possibly true--left hooks cannot be punched. I take it, then, that the verb, 'punch', does not have a type-matching reading. Perhaps a rule of thumb is that if a verb does not take complements formed from its associated verbal noun or subordinates, the verb does not have a type-matching reading. I do not claim that it follows from the fact that a verb does not take such complements, that it lacks a type-matching reading. But I have not found any exceptions. I have also not been able to think of any principled explanation of why it should be that some event verbs accept complements formed from their verbal nouns or subordinates, whereas other such verbs do not.

If type-matching readings are in fact displayed in the cases discussed above, then by (D17), those readings must be relational ones. This point may be questioned; but it seems prima-facie plausible to suppose that the readings in question are relational. For example in each of the following pairs, I take it that the complement position in each interrogative is bound by an existential quantifier--ranging over types--and that the complements of the indicatives are genuine referring terms--referring to types:

- (43) a. Did he hit anything in the second set at all?  
b. He hit Old Hale's lob.
- (44) a. Were they dancing anything familiar?  
b. They were dancing the quickstep.
- (45) a. Did she land anything in the first round?  
b. She landed that bollo punch she's been working on.

I do not see any grounds for denying that relational readings of the main verbs are indeed involved here. If such readings are involved in these cases, then I assume that there are readings available for all of (29) - (42) above that are relational as well.

#### 9.4.4 'Thinking' and 'Dancing', 'Thoughts' and 'Experiences'

One source of motivation for the proposal I am about to develop lies in the idea that the relation between the verbal noun 'thought', and the verb 'think' from which it is derived, is analogous to that between the verbal nouns 'dance', 'hit', 'shot', 'experience' (etc.), and the event

verbs from which these are derived. According to this idea, in each case, the nouns display a concrete/type ambiguity, and in each case, the idea would be, the type reading available for the noun may accompany the type-matching reading available for the verb.

There are two parts to the idea. First, the contention is that the generic relational reading of forms of the verb 'think' just is a type-matching reading. Thus,

x is thinking y

is assimilated to the case of

x is dancing y

Both formulas are taken to be satisfied by pairs whose second members are types of the very events reported by true sentences obtained by substituting singular terms for 'x' and 'y'. Both formulas are seen as expressing relations between subjects of events of the sort in question (reported by sentences that result from substitutions of the sort just mentioned), and types of those very events. The contention, then, is that the verb, 'think', on its generic, relational reading expresses a relation between thinkers and types of thinking--types of noetic event--that the modal range of generic thinking is comprised of noetic event types.

Second, the idea has it that the common noun 'thought' functions in important respects like the common nouns, 'hit', 'shot', 'dance' 'experience' (etc.). Like the latter

four, 'thought' is ambiguous: it has a concrete reading on which it applies to particular events of the relevant sort, but like the latter four, it has a type reading on which it applies to types of those events. The contention is that what we refer to when we use the term 'thought' in its shareable sense--the sense in which two persons may be said to be having the same thought--are the things to which the term applies on its type reading: to types of thinking, to types of noetic event.

I wish to stress that I do not have arguments for these contentions concerning the relational, generic reading of the verb, 'think' and concerning the "shareable" reading of the verbal noun, 'thought'. There are certainly some notable similarities between our use of 'thought', on its shareable reading, and our use of certain other verbal nouns, on what I have referred to as their type readings: we speak of having the same thoughts; likewise we may speak of having the same experiences, the same sensations, the same feelings, the same reactions, the same responses. Moreover, in all these cases it seems to me that the verb 'has' is functioning in very similar ways. In each case, the present progressive, 'is having', can be used together with a complement formed from the event noun to form a sentence that reports an event of the relevant sort.

These similarities are only suggestive, but it seems to me that they provide some motivation for supposing that

these cases should all be treated on a par. One can grant that 'experiences', 'sensations', 'feelings', etc. stand for event types but resolutely look elsewhere for items to identify as the sort of things to which 'thought' applies, in its shareable sense. But it seems reasonable at least to pursue the idea that in all of these cases, we are using the event nouns, 'thought', 'experience' 'sensation', 'feeling' etc., on readings of a common sort, readings on which all these nouns apply to types of the very events to which the verbs from which they are derived apply.

I believe it is clear that the following phenomenon does indeed occur in the case of a large number of event verbs and event nouns: the verbs have type-matching readings on which they take complements denoting types of the events to which those verbs, on those readings, apply; the derived nouns have type-readings on which they apply to just such types of event. The fact that this phenomenon arises commonly with other event verbs and event nouns is not evidence that the verb 'think' and the noun 'thought' are cases in point. But the prevalence of the phenomenon seems to me to provide some motivation for pursuing the idea that they are cases in point.



1. This passage is taken from Moore's article "Truth", in J. Mark Baldwin's Dictionary of Philosophy and Psychology, London: MacMillan, 1902, Vol.2; I got it from Cartwright [1987a] where it is quoted, p. 74.

2. See for example Salmon's discussion of "ways for things to be" in his "The Logic of What Might Have Been" (Salmon [1989]).

3. I assume that there is a circumstance of five's being the sum of two and three and a circumstance of three's being the sum of two and one, and I am inclined to say that I have just now mentioned two circumstances, not one--an occurrent belief that two plus three is five concerns, and has as its content, the former circumstance; the question whether one plus two is three concerns the latter circumstance and has that one as its content.

4. I take <sup>gen</sup>thinking to be an occurrent attitude, but I deny that it satisfies (2): though I am <sup>gen</sup>thinking an occurrent belief, *y*, and you are <sup>gen</sup>thinking a question, *y'*, whether *y* and *y'* have the same content or not, it doesn't follow that you and I are <sup>gen</sup>thinking anything in common. And there may well be other attitudes besides generic thinking that fail to satisfy (2).

Perhaps, for example, we should countenance an attitude whose modal range includes all and only wishes of the sort expressed by optatives, and deny that any such wishes are in the modal range of imperative wishing (see the discussion in Chapter 8, section 8.2.3, where the concept of imperative wishing is first distinguished). Yet an imperative wish, and an "optative" wish may nevertheless be said to have the same content. Compare, for example, the wish expressed by

(a) Arrive on time

with that expressed by

(b) If only you would arrive on time

(with respect to contexts sharing an addressee). I take it that the wish expressed (a) has the same content as that expressed by (b). As I have stressed before (Chapter 6), I am not convinced that such pairs as these should be seen as expressing different things (though I am inclined to think so). But if in general there is an attitude of "optative wishing" with a modal range disjoint from that of imperative wishing, it will be plausible to suppose that an optative wish and an imperative wish may nevertheless have the same

content. Yet since both of these attitudes would be species of the more generic attitude of wishing (tout court), that latter attitude will include wishes of either sort in its modal range. And if this is the case, that latter attitude will not satisfy (2).

5. According to one standard dictionary entry, to say that something is "noetic" is to say that it is "of or pertaining to...the intellect; characterized by, or consisting in intellectual activity" (Webster's Collegiate, 1989). This seems reasonably appropriate for the usage I am proposing. Husserl made use of a Greek phrase, 'noema', in his work on intentionality. I first came across the English adjective, 'noetic', in some of Alvin Plantinga's work in epistemology. Plantinga speaks of a person's "noetic structure", by which he means, roughly, the structure of propositions that comprises the person's beliefs, ordered according to their epistemic status for the person. I do not know whether Plantinga's terminology is derived from Husserl's.

6. It may prove tempting to suppose (even though I am hereby warning you not to) that when I speak of an event being characterized by a property, I mean that the event exemplifies that property. But this is not what I mean. Rather, when I say that an event is characterized by the property of  $\emptyset$ -ing, I mean what is more ordinarily expressed by saying that the event in question is an event of  $\emptyset$ -ing. An event of running is, as I would put it, characterized by the property of running, but the event doesn't have the property of running. My choice of terms may be misleading, but I have not found any preferable choice. Kim speaks (see [1980]) of the same relationship as that of "constitution" (the property of running constitutes any event of running). I find that Kim's phrase to be misleading as well, though in a different respect. To say that a property constitutes an event suggests that the property is essential to that event; as if every event of  $\emptyset$ -ing is essentially an event of  $\emptyset$ -ing. But this is a view upon which I wish to suspend judgment.

7. See Kim [1973] and [1980], and Goldman [1971].

8. In addition to (A10) and (7), a proof of (4) in S5 will also rely on

nec  $\forall e( e \text{ is occurring} \rightarrow e \text{ exists} )$

which I assume to be true.

9. Could there be a non-conjunctive event of two or more persons thinking a thing? I have in mind what would be called a "joint" event of thinking on the part of several persons, an event whose occurrence requires a joint effort--

in the same way that an event of moving a large couch, or of playing a sonata for four hands, may require a joint effort on the part of more than one person. This idea that certain events involve a concerted effort is familiar enough. However, the idea that there could be joint events of thinking is not so familiar. Could it be that several persons are having a thought in concert and strictly speaking not true that any one of these persons is the one having the thought? I do not see that this is an impossibility.

I assume that joint events, generally, each have more than one constituent in the role of subject. So if there are joint events of thinking then I take it that such events have more than one subject too. I shall also assume, though my intuitions are not quite firm on the matter, that a joint event of  $\emptyset$ -ing is not correctly characterized as an event of y's  $\emptyset$ -ing, for any individual y, even when y is one of the event's subjects. Consider an analogous case: suppose for example that Moe, Larry and Curly are jointly carrying a big sofa. Then there is an occurring joint event of sofa-carrying. Is this event one that may properly be characterized as one of Moe's carrying that big sofa? I am inclined to say not.

A general rule here would seem to be (roughly):

- (\*) For any event, e, if e satisfies (for 'x')
- [  $\lambda z[t \emptyset]$  characterizes x ]
- where t is a referring term (singular or plural), and  $\emptyset$  is a suitably inflected event verb phrase, then e is an event whose subject is (or whose subjects are) denoted by t.

It seems to me that (\*) captures a feature of one familiar usage of instances of (F2) in characterizing events. Consider two results concerning the application of this rule to the case of Moe, Larry and Curly's sofa-carrying. 1) The rule would tell us that this event is not one of Moe's (or Larry's or Curly's) carrying the sofa; for Moe is not the subject of that event, so according to (\*), the event can't be said to satisfy the sentence, ' $\lambda z$ [ Moe is carrying the sofa] characterizes x'. 2) (\*) does not rule out, however, that the event may properly be said to be one of Moe, Larry and Curly's carrying the piano. For Moe, Larry and Curly are the subjects of the event. These two results seem to conform with ordinary usage.

If (\*) is accepted, though, then if there are any such joint events of <sup>gen</sup>thinking, they are not noetic events. For it won't be the case for any such event, e, that there is any individual, x, nor any thought, y, such that  $\lambda z$ [x is <sup>gen</sup>thinking y] characterizes e. Then by (D13), e is not noetic.

10. There is an issue suggested here that parallels a question raised by David Lewis and others having to do with whether thoughts are properly conceived of as things "in the head". See Lewis's "What Puzzling Pierre Does Not Believe" [1981]; also relevant is a personal correspondence from Lewis to David Austin, quoted in Austin [1990], p. 110-12. Does the matter of which thoughts we may be said to be having depend on factors not "in the head"? That is a question that Lewis has said should be answered in the negative. Analogously, I am asking: does the matter of which noetic events we may be said to be engaging in depend on factors not "in the head"? Couldn't this very event of thinking occur in circumstances in which Max is hallucinating? Why should it be that whether this mental event is the one that is occurring in a situation or not depends on external, "outside the head" considerations, such as whether or not seeing some chair, in addition to Max's having a certain sensory state (which we may assume to be alike in the two cases), happens to be a causal antecedent to the thinking Max is doing? I do not know the answers to these questions; this is one reason why I shall proceed without assuming the claim expressed by (9).

11. Perhaps there are noetic event types that cannot be instantiated, and thoughts each of which cannot be entertained (i.e., each not possibly such that anyone is thinking it). If there are such types and thoughts, it may be--I am not sure about this--that any such type will be a \*correlate of any such thought. The issue is whether such a type, T, and such a thought, x, satisfy

Definiens of (D14):

T is a noetic event type & nec  $\forall e$ ( e instantiates  
 T iff  $\exists y$ (  $\exists z$ [y is <sup>gen</sup>thinking x] characterizes e))

The first conjunct is satisfied by hypothesis. The idea I am considering is, roughly, that it might turn out that no matter the choice of possible situation, and no matter the choice of event, e, the triple  $\langle e, T, x \rangle$  will fail to satisfy either side of the biconditional in the second conjunct. Then the second conjunct is satisfied vacuously. I haven't been able to settle on an opinion as to whether this would be the case for a T and x as described above.

Let T and x be fixed as some uninstantiable type and unentertainable thought, respectively. Then go to any possible situation you want. For any event that exists in that situation, e, this much will be true relative to the situation: e does not instantiate T. Then if it is also the case that the following is satisfied by e and x relative to this situation,

(a) there is no thing, y, such that  $\exists z$ [y is <sup>gen</sup>thinking x] characterizes e,

we will have it that the biconditional in the second conjunct of the definiens of (D14) is satisfied vacuously. But must (a) be satisfied by any event relative to any situation, provided that x is uninstantiable?

Suppose that necessarily, all events are at least possibly occurrent. It might be thought that this assumption gives us some leverage. For if the thesis expressed by

(4)  $\text{nec } \forall e \forall P ( P \text{ characterizes } e \rightarrow \text{nec}( e \text{ occurs} \rightarrow \text{the subject of } e \text{ has } P ) )$

were true, (a) would be satisfied by any event, e, relative to any possible situation in which e exists. By specification of x, it is impossible that there be anyone <sup>gen</sup>thinking x; then it is impossible that the subject of e should have  $\lambda y [y \text{ is } ^{\text{gen}} \text{thinking } x]$ . But now suppose, for reductio, that there is a y such that  $\lambda z [y \text{ is } ^{\text{gen}} \text{thinking } x]$  characterizes e. Then I take it that  $\lambda y [y \text{ is } ^{\text{gen}} \text{thinking } x]$  characterizes e as well. But since e possibly occurs, we have it from (4) that there are situations in which e occurs and in all of them the subject of e has  $\lambda y [y \text{ is } ^{\text{gen}} \text{thinking } z]$ . This contradicts the previous result. Consequently we must reject the reductio assumption, that there is any y such that  $\lambda z [y \text{ is } ^{\text{gen}} \text{thinking } x]$  characterizes e. We would then have established that (a) is indeed satisfied by any event relative to any situation in which that event exists. But I have suggested grounds for questioning (4) in the text; I do not assume it to express a truth. Presently I cannot see any principled reason for claiming that (a) will be satisfied relative to any situation by any event existing in that situation (with x as fixed). So I do not see any way of showing that uninstantiable types might vacuously be \*correlates of any unentertainable thoughts.

12. Here is a sketch of the proof of (15).

We may seek to show the main conditional of (15) by way of Conditional Proof (this will be a sub-proof of a Necessity-intro. proof of (15) itself). So we assume the antecedent of (15): that T is a \*correlate of x.

We then arrive at a step where we need a subproof of the left-right direction of (15)'s consequent. We may proceed by Conditional Proof: assume that y is an instancer of T; seek to show that y is <sup>gen</sup>thinking x. Since y is an instancer of T, there is an instance of T, e, in which y is engaging. But we already have assumed that T is a \*correlate of x. It follows that any instance of T, including e, is such that for some y,  $\lambda z [y \text{ is } ^{\text{gen}} \text{thinking } x]$  characterizes e. So we have that there is an occurring event (we have e in mind), of which y is a subject, such that, for some y, this event is characterized by  $\lambda z [y \text{ is } ^{\text{gen}} \text{thinking } x]$ . But then we can show that if this is the

case, then  $y$  is  $g^{en}$ thinking  $x$ . The proof here will rely on (A10) (that if an event is characterized by a property, and the event is occurring, then the subject of  $e$  has that property), on (A12) and (A13) (for uniqueness of a subject of  $e$ ), and on (D13) (the definition of 'noetic event'). Then modus ponens will give us that  $y$  is  $g^{en}$ thinking  $x$ , Q.E.D.

Then it remains to show the right-left direction of (15)'s consequent. Again we proceed by Conditional Proof; this time we assume that  $y$  is  $g^{en}$ thinking  $x$ , and aim to show that  $y$  is an instancer of  $T$ . From our assumption and (A16), we get that there is an event,  $e$ , characterized by  $\lambda z[y$  is  $g^{en}$ thinking  $x]$  in which  $y$  is engaging. But from the antecedent assumption that  $T$  is a \*correlate of  $x$ , we get that for any event, if there is a  $y$  such that  $\lambda z[y$  is  $g^{en}$ thinking  $x]$  characterizes that event, then that event is an instance of  $T$ . Then we will be able to show that there is an occurring instance of  $T$  (we have  $e$  in mind) whose subject is  $y$ . From this and (D15) it follows that  $y$  is an instancer  $T$ , Q.E.D.

13. Carlson has suggested (in Carlson [1977], cf. section 2.3) that just about any common noun,  $cn$ , has an additional reading that could be paraphrased by saying: "kind of  $cn$ ". This, he claims, is true not only for count nouns but as well for mass nouns, concrete as well as abstract, standing for events or not. I take it that this reading could be paraphrased as well by saying: "type of  $cn$ ". If so, then Carlson's suggestion is that the phenomenon of what I am calling "type readings" is ubiquitous among common nouns.

## Bibliography

Anscombe, Elizabeth and Geach, Peter [1971]. Descartes Philosophical Writings. Indianapolis, IN: Bobbs-Merrill, 1971.

Aronszajn, Mark. "Thought and Circumstance". In The Journal of Semantics 6, 1988, pp. 271-307.

Austin, David [1990]. What's the Meaning of 'This'?. Ithica, NY: Cornell University Press, 1990.

Bennett, Jonathan [1988]. Events and Their Names. Indianapolis, IN: Hackett, 1988.

Bergmann, Gustav [1960]. "Acts". Reprinted in Logic and Reality, Madison, WS: University of Wisconsin Press, 1964, pp. 3-44.

Carlson, Greg [1977]. "A Unified Analysis of the English Bare Plural". In Linguistics and Philosophy 1, 1977, pp. 413-57.

Cartwright, Richard [1962]. "Propositions". Reprinted in Cartwright [1987c], pp. 33-53.

----- [1987a]. "A Neglected Theory of Truth". In Cartwright [1987c], pp. 71-93.

----- [1987b]. "On the Origins of Russell's Theory of Descriptions". In Cartwright [1987c], pp. 95-133.

----- [1987c]. Philosophical Essays. Cambridge, MA: MIT Press, 1987.

Chellas, Brian [1969]. The Logical Form of Imperatives (Ph.D Dissertation, Stanford University). Ann Arbor, MI: University Microfilms, 1969.

Chisholm, Roderick [1976]. Person and Object: A Metaphysical Study. La Salle, IL: Open Court, 1976.

----- [1981]. The First Person: An Essay on Reference and Intentionality. Minneapolis, MN: University of Minnesota Press, 1981.

Chomsky, Noam [1975]. "Some Remarks about Nominalization". In Donald Davidson and Gilbert Harman (eds.), The Logic of Grammar. Encino, CA: Dickenson, 1975, pp. 262-89.

Cottingham, John and Stoothof, Robert and Murdoch, Dugald [1985]. The Philosophical Writings of Descartes Volume I. Cambridge, England: Cambridge University Press, 1985.

----- [1986]. The Philosophical Writings of Descartes Volume II. Cambridge, England: Cambridge University Press, 1986.

Cresswell, Max [1973]. Logics and Languages. London, England: Methuen, 1973.

Davidson, Donald and Harman, Gilbert [1972], (eds.). The Semantics of Natural Language. Dordrecht, Holland: Reidel, 1972.

Fine, Kit [1989]. "The Problem of De Re Modality". In Joseph Almog, John Perry and Howard Wettstein (eds.), Themes from Kaplan. New York, NY: Oxford University Press, 1989, pp. 197-272.

Frege, Gottlob [1956]. "The Thought: A Logical Inquiry". Translated by A. Quinton and H. Quinton in Mind, LXV, 1956, pp. 289-311.

----- [1963]. "Compound Thoughts". Reprinted in E.D. Klemke (ed.), Essays on Frege, Chicago, IL: University of Illinois Press, 1968, pp. 537-58.

----- [1970]. "On Sense and Reference". In Peter Geach and Max Black, Philosophical Writings of Gottlob Frege, Oxford, England: Basil Blackwell, 1970, pp. 56-78.

Goldman, Alvin [1971]. "The Individuation of Actions". In The Journal of Philosophy 68, 1971, pp. 761-74.

Haldane, Elizabeth S. and Ross, G.R.T. [1931]. The Philosophical Works of Descartes. Cambridge, England: Cambridge University Press, 1931.

Hare, R.M. [1952]. The Language of Morals. Oxford, England: Oxford University Press, 1952.

----- [1972]. Practical Inferences. Berkeley and Los Angeles, CA: University of California Press, 1972.

Heidelberger, H. [1980a]. "Beliefs and Propositions: Comments on Clark". In P. French, T. Uehling and H. Wettstein (eds.) Midwest Studies in Philosophy V, Minneapolis, MN: University of Minnesota Press: 1980, pp. 425-32.



----- [1980b]. "Understanding and Truth Conditions" In P. French, T. Uehling and H. Wettstein (eds.) Midwest Studies in Philosophy V, Minneapolis, MN: University of Minnesota Press: 1980, pp. 401-10.

Kaplan, David [1975]. "How to Russell a Frege-Church". In The Journal of Philosophy 72, 1975, pp. 716-29.

----- [1989a]. "Afterthoughts". In Joseph Almog, John Perry and Howard Wettstein (eds.), Themes from Kaplan, Oxford, England: Oxford University Press, 1989, pp. 565-614.

----- [1989b]. "Demonstratives". In Joseph Almog, John Perry and Howard Wettstein (eds.), Themes from Kaplan, Oxford, England: Oxford University Press, 1989, pp. 481-563.

Kazmi, Ali Akhtar [1987]. "Quantification and Opacity". In Linguistics and Philosophy 10, 1987, pp. 77-100.

Kim, Jaegwon [1973]. "Causation, Nomic Subsumption, and the Concept of an Event". In The Journal of Philosophy 70, 1973, pp. 217-36.

----- [1980]. "Events as Property Exemplifications". In Miles Brand and Douglas Walton (eds.) Action Theory. Dordrecht, Holland: Reidel, 1980, pp. 159-77.

Kripke, Saul [1977]. "Speaker's Reference and Semantic Reference". In Midwest Studies in Philosophy II, Minneapolis, MN: University of Minnesota Press, 1977, pp. 255-76.

----- [1980]. Naming and Necessity. Cambridge, MA: Harvard University Press, 1980.

Lewis, David [1972]. "General Semantics". In Donald Davidson and Gilbert Harman, (eds.) The Semantics of Natural Language. Dordrecht, Holland: Reidel, 1972, pp. 169-218.

----- [1973]. Counterfactuals. Cambridge, MA: Harvard University Press, 1973.

----- [1979a]. "Attitudes De Dicto and De Se". Reprinted in David Lewis, Philosophical Papers Volume I, Oxford, England: Oxford University Press, 1983, pp. 133-59.

----- [1979b]. "Score-Keeping in Language Games". Reprinted in David Lewis, Philosophical Papers Volume I, Oxford, England: Oxford University Press, 1983, pp. 233-49.

----- [1980]. "Index, Context and Content". In Stig Kanger and Sven Ohman (eds.), Philosophy and Grammar, Dordrecht, Holland: D. Reidel, 1980, pp. 76-98.

- [1981]. "What Puzzling Pierre Does Not Believe". In Australasian Journal of Philosophy 59, 1981, pp. 283-89.
- Montague, Richard [1974]. "On the Nature of Certain Philosophical Entities". In Richard Montague, Formal Philosophy, New Haven, CT: Yale University Press, 1974, pp. 188-221.
- Moore, G.E. Some Main Problems in Philosophy. London, England: George Allen & Unwin, 1953.
- Parsons, Terence [1985]. "Underlying Events in the Logical Analysis of English". In E. LePore and B. McLaughlin (eds.) Actions and Events: Perspectives on the Philosophy of Donald Davidson, Oxford, England: Basil Blackwell, 1985, pp. 235-67
- [1989]. "The Progressive in English: Events, States and Processes". In Linguistics and Philosophy 12, 1989, pp. 213-41.
- Prior, A.M. [1971]. Objects of Thought. London, England: Oxford University Press, 1971.
- [1976]. The Doctrine of Propositions and Terms. Amherst, MA: University of Massachusetts Press, 1976.
- Quine, W.V.O. [1976]. "Quantifiers and Propositional Attitudes". Reprinted in W.V.O. Quine, The Ways of Paradox and Other Essays, Cambridge, MA: Harvard University Press, 1976, pp.185-96.
- Richard, Mark [1981]. "Temporalism and Eternalism". In Philosophical Studies 39, 1981, pp. 1-13.
- [1982]. "Tense, Propositions and Meanings". In Philosophical Studies 41, 1982, pp. 337-51.
- [1986]. "Quotation, Grammar and Opacity". In Linguistics and Philosophy 9, 1986, pp. 383-403.
- [1987]. "Quantification and Leibniz' Law". In The Philosophical Review 96, 1987, pp. 555-578.
- Russell, Bertrand [1904]. "Meinong's Theory of Complexes and Assumptions". Reprinted in D. Laskey (ed.), Essays in Analysis, New York, NY: George Braziller, 1973, pp. 21-76.
- [1906]. "On the Nature of Truth and Falsehood". Reprinted in B. Russell, Philosophical Essays, London, England: George Allen & Unwin, 1966, pp. 147-59.

----- [1956]. "The Philosophy of Logical Atomism". In George Marsh (ed.), Logic and Knowledge, London, England: George Allen & Unwin, 1956, pp. 175-281.

Salmon, Nathan [1981]. Reference and Essence. Princeton, NJ: Princeton University Press, 1981.

----- [1982]. "Assertion and Incomplete Definite Descriptions". In Philosophical Studies 42, 1982, pp. 37-45.

----- [1986]. Frege's Puzzle. Cambridge, MA: MIT Press, 1986.

----- [1989]. "The Logic of What Might Have Been". In The Philosophical Review 98, 1989, pp. 3-34.

Soames, Scott [1987a]. "Direct Reference, Propositional Attitudes and Semantic Content". In Philosophical Topics 15, 1987, pp. 47-87.

----- [1987b]. "Substitutivity". In Judith Jarvis Thomson, On Being and Saying: Essays for Richard Cartwright, Cambridge, MA: MIT Press, 1987, pp. 99-132.

Sosa, Ernest [1967]. "The Semantics of Imperatives". In American Philosophical Quarterly 4, 1967, pp. 57-64.

Stenius, Eric [1967]. "Mood and Language-game". In Synthese 17, 1967, pp. 254-74.

Strawson, P.F. [1956]. "On Referring". Reprinted in A.P. Martinich (ed.), The Philosophy of Language, Oxford, England: Oxford University Press, 1985, pp. 220-35.

Vendler, Zeno [1967]. Linguistics in Philosophy. Ithaca, NY: Cornell University Press, 1967.

----- [1972]. Res Cogitans. Ithaca, NY: Cornell University Press, 1972.

